



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

99-PRO-727

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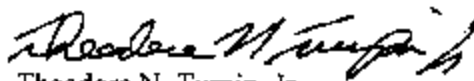
Dr. W. J. Madia, Director  
Pacific Northwest National Laboratory  
Richland, Washington 99352

Dear Dr. Madia:

CONTRACT NO. DE-AC06-76RL01830 - MODIFICATION M304

Enclosed for your files is a fully executed copy of the subject modification. Please contact me on (509) 376-5300 if you have any questions.

Sincerely,

  
Theodore N. Turpin, Jr.  
Contracting Officer

PRO:TNT

Enclosure

cc w/encl:  
K. L. Hocwing, PNNL

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES
2. AMENDMENT/MODIFICATION NO. M304	3. EFFECTIVE DATE See Block 16C	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY U.S. Department of Energy Procurement Services Division P.O. Box 550, A7-8C Richland, WA 99362	7. ADMINISTERED BY (If other than item 6) CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, city, county, state and zip code) Battelle Memorial Institute Pacific Northwest National Laboratory Richland, WA 99352		(X)	9A. AMENDMENT OF SOLICITATION NO.	
			9B. DATED (SEE ITEM 11)	
		X	10A. MODIFICATION OF CONTRACT/ ORDER NO. DE-ACC6-76RL01830	
CODE	FACILITY CODE		10B. DATED (SEE ITEM 13) 12/30/84	

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning copies of the amendment. (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

**12. ACCOUNTING AND APPROPRIATION DATA (If required)**

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14. PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 42 USC 252, as amended: The Atomic Energy Act of 1954, as amended; and the
	D. OTHER (Specify type of modification and authority): Department of Energy Organization Act.

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 2 copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)**

This is a modification of the contract for management and operation of the Pacific Northwest National Laboratory.

This modification revises one clause within Section 7, and revises Appendix D, E, and G of Section J as specified below:

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print) Karen L. Hoewing, General Counsel	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Theodore N. Turpin, Jr., Contracting Officer
15B. CONTRACTOR/OFFEROR <i>Karen L. Hoewing</i> (Signature of person authorized to sign)	15C. DATE SIGNED 7/30/99
15D. UNITED STATES OF AMERICA <i>Theodore N. Turpin, Jr.</i> (Signature of Contracting Officer)	15E. DATE SIGNED 8/2/99

1. Change Section I as follows:

- Change I-14 Organizational Conflicts of Interest, paragraph (b)(1)(I) as follows:
  - (i) The contractor shall be ineligible to participate in any capacity in Department contracts, subcontracts, or proposals therefor (solicited and unsolicited) which stem directly from the contractor's performance of work under this contract for a period of two (2) years after the completion of this contract. Furthermore, unless so directed in writing by the contracting officer, the Contractor shall not perform any advisory and assistance services work under this contract on any of its products or services or the products or services of another firm if the contractor is or has been substantially involved in their development or marketing. Nothing in this subparagraph shall preclude the contractor from competing for follow-on contracts for advisory and assistance services.

2. Change Section J as follows:

- Change Appendix D, List of Applicable DOE Directives as follows:
  - Delete the following directives:
    - DOE 1430.1D "Scientific and Technical Information Management"
    - DOE 1540.1A "Materials Transportation and Traffic Management"
    - DOE 1540.2 "Hazardous Material Packaging for Transport Administrative Procedures"
    - DOE 5480.25 "Safety of Accelerator Facilities"
    - DOE 5480.29 "Employee Concerns Management System"
    - DOE 5480.3 "Safety Requirements for the Packaging & Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes"
    - DOE 5630.12A, Safeguards and Security Inspection and Evaluation Program"
    - DOE 5650.2B "Identification of Classified Information"
    - DOE 5700.6C "Quality Assurance"
    - DOE M 140.1-1 "Manual for Department of Energy Interface with the Defense Nuclear Facilities Safety Board"
    - DOE M 471.2-1A "Manual for Classified Matter Protection and Control"
    - DOE/RL 93-75 "Hanford Facility Contingency Plan"
    - RLID 1300.1C "Richland Operations Office Site Representative Program"
  - Add the following directives:
    - DOE O 420.2 "Safety of Accelerator Facilities"
    - DOE O 414.1 "Quality Assurance"
    - DOE O 225.1A "Accident Investigations"
    - DOE O 241.1 "Scientific and Technical Information Management"
    - DOE O 442.1 "Department of Energy Employee Concerns Program"
    - DOE O 460.1A "Packaging and Transportation Safety"
    - DOE O 460.2 "Departmental Materials Transportation and Packaging"
    - DOE O 470.2 "Safeguards and Security Independent Oversight Program"
    - DOE M 140.1-1A "Interface with the Defense Nuclear Facilities Safety Board"
    - DOE M 471.2-1B "Classified Matter Protection and Control Manual"
    - DOE M 474.1-2 "Nuclear Materials Management and Safeguards System Reporting and Data Submissions, change 2"
    - DOE M 475.1-1 "Identifying Classified Information"
    - RLID 470.2 "Facility Approval and Registration of Activities"
    - RLID 1300.1D "Facility Representative Program"

- Delete Appendix E, Standards of Performance-Based Fee, pages J-E-iii through J-E-101 and replace with the attached pages J-E-iii through J-E-127, in lieu thereof.
- Change Appendix G, Listing of Key Personnel (J-G-1) in its entirety and replace it with the attached Listing of Key Personnel (J-G-1), in lieu thereof.

**APPENDIX E**  
**STANDARDS OF PERFORMANCE-BASED FEE**

**FY 1999**  
**BATTELLE PERFORMANCE EVALUATION AND FEE AGREEMENT**  
**For**  
**Management and Operations of the**  
**Pacific Northwest National Laboratory**

Approved and Signed by Both Parties  
September 30, 1998

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## INTRODUCTION

Fiscal Year 1999 represents the third full year utilizing a results-oriented, performance-based evaluation for the Contractor's operations and management of the DOE Pacific Northwest National Laboratory (here after referred to as the Laboratory). However, this is the first year that the Contractor's fee is totally performance-based utilizing the same Critical Outcomes. This document describes the critical outcomes, objectives, performance indicators, expected levels of performance, and the basis for the evaluation of the Contractor's performance for the period October 1, 1998 through September 30, 1999, as required by Clauses entitled "Use of Objective Standards of Performance, Self Assessment and Performance Evaluation" and "Performance Measures Review" of the Contract DE-AC06-76RL01830. Furthermore, it documents the distribution of the total available performance-based fee and the methodology set for determining the amount of fee earned by the Contractor as stipulated within the clauses entitled "Estimated Cost and Annual Fee," "Total Available Fee" and "Allowable Costs and Fee." In partnership with the Contractor and other key customers, the Department of Energy (DOE) Headquarters (HQ) and Richland Operations Office (RL) has defined four critical outcomes that serve as the core for the Contractor's performance-based evaluation and fee determination. The Contractor also utilizes these outcomes as a basis for overall management of the Laboratory.

As stated above four critical outcomes have been established for FY 1999. These outcomes are based on the following needs identified by DOE and other customers of the Laboratory. The DOE desires quality and relevant science, effective utilization of user facilities, and efficient programmatic performance. All our customers (EM, NN, ER, & EE) want technology developed, demonstrated, and deployed to solve environmental cleanup, national security, energy, and fundamental science issues. Furthermore the DOE wants improved leadership/management, cost-effective operations, and maintenance of a work environment which fosters innovative thinking and high morale. The Department also desires compliance with environment, safety and health (ES&H) standards and disciplined conduct of operations for protection of the worker, environment, and the public. As with all of Hanford, DOE expects contribution of the Laboratory to the economic development of the Tri-Cities community, and the region, to build a new local economy that is less reliant on the Hanford mission, as well as enhancing the status of the Laboratory as a valued corporate citizen of the Northwest Region. The Critical Outcome system focuses all of these customer desires into specific objectives and performance indicators, with supporting measures to track and foster continued improvement in meeting the needs (outcomes) of the Laboratory's customers.

For FY 1999 the Critical Outcomes will be utilized to determine the amount of the total available fee of \$7,100,000.00 earned by the Contractor within the two areas specified within the contract clauses "Allowable Costs and Fee." Battelle shall receive a performance-based fee of up to \$5,700,000.00 based on the overall rating of all the four critical outcomes. Furthermore, the contractor may be eligible for additional performance-based fee of up to \$1,400,000.00 if the Scientific and Technological Excellence Outcome is rated at Excellent or above.

Note: All fee is assigned at the Critical Outcome level and no fee has been delegated to the objective or performance indicator levels throughout this document. Although the indicators within each Outcome shall be the primary means for determining to what extent the Contractor has met each Outcomes, the DOE-RL Contracting Officer may consider any other information available to him/her which relates to the Contractor's performance of all other contract requirements set forth in the Statement of Work, Work Authorization Directive, or similar document in final determination of fee earned as stipulated within the clause entitled "Conditional Payment of Fee" within the contract DE-AC06-76RL01830.

### Performance-based Fee Allocation Strategy

The fee allocation strategy for the Battelle contract with DOE RL, for the management and operation of the Laboratory, is based on the principle that performance-based fee should be viewed as a benefit to DOE; that if the contractor performs well, more fee should be earned. This is consistent with contract reform and the Functional Cost Reporting System formulated by the Financial Management System Improvement Council. This principle leads to a strategy of incrementally rewarding exemplary performance rather than



incentivizing particular activities and deliverables. Such a strategy transcends a narrow focus on outputs and elevates the performance discussion to the level of outcomes aligned with the mission and agenda of the institution.

Thus, while remaining performance-based, fee allocation may be seen as a strategic investment into certain areas, or portfolios, critical to the DOE and its Laboratory. Each allocation represents the collective wisdom of the senior strategic decision-makers within the DOE Operations Office, the DOE Headquarters institutional steward, and the Contractor. In the case of the Pacific Northwest National Laboratory, these investment portfolios for Fiscal Year 1999 are the four Critical Outcomes identified below. Since management fee is inherently beneficial, the performance-based fee is allocated according to the key decision-makers' judgement of the perceived relative benefit of each Outcome as indicated by the weightings assigned to each. This is true for the overall performance-based fee as well as the additional performance-based fee.

As the primary mission of the Laboratory is science and technology, exemplary achievement in this area is paramount. Similarly, safe effective, efficient operations, leadership, and management outcomes are of equal strategic importance to each other, but of lesser importance than the primary mission. Finally, while sensitivity and responsiveness to community expectations and overall corporate citizenship are essential to institutional success, this outcome is judged to be of the least strategic benefit—worthy of reward, but in smaller amount.

This allocation strategy is aligned with the DOE Strategic Plan, the DOE Laboratory Mission Plan, the Hanford Strategic Plan, as well as the Institutional Plan for the Laboratory. It represents the collective wisdom, formed in partnership, of the senior leadership of DOE Headquarters, the Operations Office, and the Contractor. The strategy rewards the Contractor and benefits DOE for optimizing overall performance against critical outcomes rather than inviting focus on a few outputs to the detriment of others. The following sections detail the process whereby the fee allocation strategy is implemented and the fees earned are actually determined.

Section I provides information on how the overall performance rating for the Contractor, as well as how the performance-based fee earned (if any) will be determined.

Section II provides information on how the additional available performance-based fee earned (if any) shall be determined utilizing the Scientific and Technological Excellence Critical Outcome as the gateway for additional fee earnings.

Section III provides the detailed information concerning critical outcomes, objectives, performance indicators and expectations of performance, along with the matrix for determining the amount of additional performance-based fee earned (if any) for each outcome.

Section IV describes the commitments for documenting and reporting the Laboratory's self-evaluation.

## I. DETERMINING THE CONTRACTOR'S PERFORMANCE RATING AND PERFORMANCE-BASED FEE

The FY 1999 Battelle performance evaluation rating will be determined using a process wherein progress against each Performance Indicator will result in a corresponding point value. The point values of each Performance Indicator will be taken from the associated Contingency Diagram. Points for each Performance Indicator will be added to determine a numeric rating for the corresponding Objective.

The sum of the points for each Objective supporting a Critical Outcome will then be weighted according to this agreement and added to determine the point value for the Critical Outcome. The point value for each Critical Outcome will determine an adjectival rating in accordance with the corresponding table for each Critical Outcome. The adjectival rating and corresponding point value for each Critical Outcome will be weighted in accordance with the Table A, below, and will be added to determine the Contractor's point total. The total points will be compared to the scale in Table B, below; to determine an overall Contractor adjectival rating and the amount of performance-based fee earned.

This technique carries raw points and weighted points forward through the entire process. A detailed explanation is provided below.

Performance Indicator Score Development: Raw scores for each Performance Indicator are determined by plotting year-end performance along the x-axis of the associated Contingency Diagram and adding the Effectiveness points accumulated along the Y-axis and translating that level to the appropriate number value using the scales for each indicator found in this document.

Evaluation of Objectives: Point scores for each Objective are determined by adding the individual Effectiveness scores for each Performance Indicator from the associated Contingency Diagram. The totals of each of the Objectives are then converted to the 5 point scale utilized by DOE (1.0 - 5.0) utilizing the normalization table for each Objective. Each Objective is then weighted according to the weightings provided in each Critical Outcome section.

Critical Outcome Evaluation: Numeric Critical Outcome scores are weighted as defined in Table A below and are summed to determine the Contractor's overall weighted evaluation score.

Determining the Overall Contractor Adjectival Rating: The total Critical Outcome score is compared to an adjectival rating scale, see Table B below, to determine the overall Contractor rating for Fiscal Year 1999.

Determining the Amount of Performance-Based Fee Earned: The total Performance-Based Fee earned is determined based on the over all Contractor adjectival rating for Fiscal Year 1999 as indicated within Table B below (an Excellent rating and above earns 100% of the available performance-based fee, a Good rating provides 80% of the available performance-based fee, a Marginal and below performance earns 0% of the available performance-based fee).

Note: All numeric values that have been normalized to the 5 point scale specified in this document will be rounded to the nearest tenth of a point using the standard rounding convention of x.49 and less rounds down to the nearest tenth, while x.50 and greater rounds up to the nearest tenth. Rounding will be performed at each calculation level.

Critical Outcome	Subjective Rating	Score	Weight	Weighted Score
Scientific and Technological Excellence			55%	
Operational Excellence			20%	
Leadership & Management			20%	
Community Relations			5%	
			<b>Total</b>	

Table A. FY 1998 Contractor Evaluation Score Calculation

Total Score	5.0 - 4.5	4.4 - 3.5	3.4 - 2.5	2.4 - 1.5	<1.5
Final Rating	Outstanding	Excellent	Good	Marginal	Unsatisfactory
Performance-Based Fee	\$5,700,000.00	\$5,700,000.00	\$4,560,000.00	\$0.00	\$0.00

Table B. Overall Contractor Adjectival Rating and Performance-Based Fee Scale

## II. AVAILABILITY OF ADDITIONAL PERFORMANCE-BASED FEE

A total available additional performance-based fee of \$1,400,000.00 has been allocated among the critical outcomes for Fiscal Year 1999 as specified within Table C below. However, the additional performance-based fee is only available to be earned by the Contractor if the Scientific and Technological Excellence Critical Outcome is rated at Excellent or above. If this gateway is achieved, then the Contractor shall be eligible to claim the otherwise additional performance-based fee earned for each critical outcome as specified within the Available Performance-Based Fee Matrix designated with each outcome (see tables 1.4, 2.11, 3.4, and 4.4).

Critical Outcome	Total Available Additional Performance-Based Fee
Scientific and Technological Excellence	\$770,000.00
Operational Excellence	\$280,000.00
Leadership and Management	\$280,000.00
Community Relations	\$70,000.00

### III. CRITICAL OUTCOMES, OBJECTIVES & PERFORMANCE INDICATORS

#### Background

To ensure both the short and long-term ability of the Pacific Northwest National Laboratory to meet DOE missions and provide high-value products and services to the DOE and other customers, the DOE-HQ and RL, in partnership with the Contractor, evaluated DOE and other customer needs and current operating environments to develop the Laboratory's four Critical Outcomes. While they are validated annually the Critical Outcomes typically have a 3-5 year time horizon.

The outcome-oriented approach focuses the evaluation of the Contractor's performance against these Critical Outcomes. Progress against these outcomes is measured through the use of specific performance indicators (objective and subjective) that primarily focus on end-results or impact and not on processes or activities. These measures are embodied within the formal contract through Appendix E and F of Section J.

#### Performance Expectations

The four Critical Outcomes and their objectives, as agreed to by DOE-HQ, RL and the Contractor, provide the framework for evaluation and fee determination for Fiscal Year 1999. With this framework DOE-RL and Contractor staff have teamed to develop mutually-agreed upon performance indicators. In addition, considerable effort has been devoted to developing an understanding of the performance expectations associated with each of the objective and subjective performance indicators. The specific performance expectations and associated performance ratings and performance-based fee are contained within this document.

#### Change Control

While the Critical Outcomes described herein represent the current set for the Contractor they can also be changed as prevailing scientific, and/or economic factors change. When this happens, the objectives and the resulting performance indicators will also be altered to ensure movement of the Laboratory in a direction consistent with the expectations of its customers. The content of this document will be managed via formal change control. Changes to the FY 1999 Performance Evaluation and Fee Agreement will be documented by completing the Change Control Tracking Sheet (see Appendix A). The sheet is self-explanatory and require the concurrence of both RL and the Contractor Critical Outcome Owners as well as a documented description of the proposed modification and a documented rationale for the modification to include what effects (if any) the change may have on the ability for the Contractor to earn performance-based fee.

Once the Critical Outcome Owners have concurred with the modification, RL staff should forward the form with the prescribed attachments to Terry L. Davis at mail stop K8-50. Contractor staff should forward the change control form, with attachments, to Randy R. LaBarge at mail stop K1-30. They shall ensure that all required information has been provided and that both Critical Outcome Owners have concurred in the modification. The modification will then be logged in and final RL and Contractor approvals obtained as necessary to include Contracting Officer approval. Once approved the document will be updated through RL Document Control and revised pages will be issued.

The above process is the preferred method for incorporating changes to this document, however, if the Parties cannot reach agreement on the changes to critical outcomes, objectives, performance indicators, and/or expected levels of performance, the Contracting Officer shall have the right to unilaterally establish changes as referred to within the clause entitled "Total Available Fee" within the contract DE-AC06-76RL01830.

**Critical Outcomes, Objectives, and Performance Indicators**

The following sections describe the Critical Outcomes; their supporting objectives, and associated performance indicators for FY 1999 as well as the matrix for additional performance-based fee for each outcome.

## 1.0 SCIENTIFIC AND TECHNOLOGICAL EXCELLENCE (55%)

### Critical Outcome

**Battelle will conduct high quality, externally recognized, scientific research and development programs.**

Modification: The objectives, indicators and expected levels of performance identified below have been developed based on the best information available at the time. Should circumstances arise which require modifications to any of the objectives, indicators and/or expected levels of performance within this outcome it shall be accomplished through the approved change control process described within this document. If the Parties cannot reach agreement on the changes the Contracting Officer shall have the right to make reasonable changes as specified within the contract DE-AC06-76RLRL01830.

### 1.1 Objective: Conduct high quality science and technology programs as measured by the following indicators (25%)

#### 1.1.1 Results of external peer review of relevance and excellence, including Divisional reviews

Description: The results from Research Division Review Committees (none of whom are Battelle employees) and DOE program offices are evaluated to determine performance against this indicator.

A) Division Review Committee Evaluations: Division reviews (performed by Research Division Review Committees) will be provided to the Director of the Laboratory. Research Division reviews shall follow the guidance provided in the Laboratory Subject Area entitled, "Peer Review". The results from these reviews, including performance levels and trends and Laboratory response, also will be summarized into an overall evaluation and performance rating based on the standard 5 adjectival scale.

The following Division reviews are planned:

- Environmental and Health Sciences Division
- Environmental Technology Division
- Energy Technology Division
- National Security Division

B) DOE Program Office Reviews: DOE Program Offices determine those peer reviews to be conducted in any given year. DOE Program reviews can include an evaluation of the following:

- Quality of Science and technology
- Relevance to DOE missions or national needs
- Effective and efficient program management
- Success in construction and operation of facilities.

DOE-HQ Program reviews currently anticipated for FY 1999 include the following:

- Chemical Sciences Program: OBES-Chemical Sciences Division
- Materials Science Program: OBES-Materials Sciences Division

Performance: Composite of all scheduled peer reviews.

Target: Outstanding  
Neutral: Good  
Minimum: Unsatisfactory

#### 1.1.2 Recognition by the external scientific and technical community

Description: The three types of "recognition" information that are gathered include: Awards, Invited Talks, and Committee Service. A standard of quality and/or significance has been developed for each recognition type from which to judge the recognition for inclusion in this performance indicator. Each of the following categories has three standards of quality/significance. Point rankings will be assigned to each [3, 2, and 1] for quantifying the performance measure. This indicator focuses on forms of recognition qualifying for the ranking of Level 3 as identified below.

##### Awards

- Level 3: highest honors/recognition from an external professional society or organization; adjunct faculty (1<sup>st</sup> year appointed); fellows
- Level 2: long-term achievement/service awards from major state, national, or international scientific and technical bodies
- Level 1: general external professional recognition (e.g., assisting in event, authoring special publication, or special distinction from a professional organization)

##### Invited Talks

- Level 3: Invited keynote speaker, invited to present as a noted expert in the field at national or international forum, course teacher, or critical event organizer for a major professional organization or event
- Level 2: Invited presenter at or active contributor to a major professional organization or event
- Level 1: general invited participant to a professional organization or event

##### Committee Service

- Level 3: highest external service/appointment recognition by a state, national, or international level professional community (e.g., directorships, editorial boards, peer review panels, major strategic alliance assignments with scientific agencies or industry, continuing faculty appointments after first year).
- Level 2: long-term recognition from or invited membership to a major scientific or technical body (e.g., state, national, or international committees, boards, and panels)
- Level 1: short-term external professional service/appointment assignments (e.g., supporting key event or meeting)

The following is planned:

- Category scopes and a ranking system for each category have been established (Awards, Invited Talks, and Committee Service) and included based upon meeting the standard of quality mentioned above.
- Recognition data will continue to be gathered in FY 1999, with the FY 1999 performance indicator target being established relative to the average of the sum total of the recognition categories for FY 1997 and FY 1998.
- By FY 2000, data will exist to establish a three-year rolling average measurement basis for Recognition by the Scientific and Technical Community.

Performance: Percentage change in total points

Target: 10% increase in Level 3 recognition items  
Neutral: 0% increase in Level 3 recognition items  
Minimum: 10% decrease in Level 3 recognition items

#### 1.1.3 Number of R&D 100 and FLC awards

Description: The indicator will be based on a 3 year rolling average of the number of R&D 100 and FLC Awards received by the Laboratory each year.

R&D Awards are submitted in the early spring for a summer notification.

FLC Awards are submitted in September for December notification.

Performance Expectation Related Assumptions: The Laboratory is allowed a maximum of four FLC submissions.

Performance:

Target: Three-year average of 8.0 or better  
Neutral: Three-year average of 7.33  
Minimum: Three-year average of 6.66 or less

#### 1.1.4 Publication Growth

Description: This indicator reflects changes or trends in the number of publications by staff in important journals resulting from activities completed while employed by or affiliated with the Laboratory. Using only those databases and research services produced by ISI (Institute for Scientific Information), a search will be conducted to identify articles published by authors listing Pacific Northwest National Laboratory (or variant names) as their affiliation. Current year data will be compared to the average from the previous 3 years. To ensure adequate time to complete the analysis, it may be necessary to use a time frame not strictly in accordance with the Fiscal Year; however, the exact time frame will be determined after further discussions with ISI and will be consistent thereafter.

Additionally, the Laboratory will conduct a benchmarking activity designed to enhance our knowledge and understanding of the impact our publications have in the scientific and technical community.

Performance Expectation Related Assumptions: Baseline data will be established by the end of the 2<sup>nd</sup> quarter of FY1999 and will be provided at the mid-year Critical Outcome presentation. Additionally, the performance goals will be re-evaluated at that time to determine if modifications to this indicator are necessary.

Performance:

Target:  $\geq 5\%$  growth  
Neutral: 0% change  
Minimum:  $\leq -15\%$  growth

#### 1.1.5 Number of quality academic/scientific partnerships

Description: This indicator consists of two parts. The first measures the number of quality strategic partnerships between the Laboratory and colleges, universities, and other academic support organizations that link institutional goals, interests, and capabilities so that substantive collaborations may occur that enhance the research and education missions of the partners. The



second part drives the development of mechanism to measure the number of strategic partnerships between the Laboratory and other national laboratories and industry.

1.1.5.1 Battelle will continue and/or establish strategic research/education partnerships with colleges, universities, and other academic support organizations that enhance the Laboratory's science/technology mission and are consistent with the relevant provisions of the Department of Energy's Strategic Plan. These partnerships will:

1. develop/enhance strategic research/education partnerships with Northwest colleges, universities, and other academic organizations that strengthen specific core technical capabilities of the Laboratory, enhance the Laboratory's science/technology mission, and support the research and education missions of Laboratory partners, and
2. develop/enhance integrated research/education partnerships and collaborations with colleges, universities, and other academic organizations that augment/strengthen the Laboratory's mission and broad set of core technical capabilities, enhance the Laboratory's science/technology mission, and support the research and education missions of Laboratory partners.

Progress during FY 1999 will be tracked and based on the following measures:

The number of partners that meet the Laboratory's quality criteria for research/education partnerships in 3 areas: informal/formal agreements, appointments, and substantive interactions/collaborations. Approximately 20 separate criteria are used to quantify the extent and quality of the academic/scientific relationships under this indicator. Institutions demonstrating commitment and accomplishment in at least 12 of those 20 measures are deemed "Robust" partners. Those with at least 9 criteria fulfilled are "Developing" partners. And those with at least 6 are "Emerging" partners. (Colleges or universities with fewer than 6 facets of interaction with the Laboratory are not counted as partners.)

Performance Expectation Related Assumptions: Ability to meet this indicator is heavily influenced by funding.

Performance:

Target:	80 partners
Neutral:	55 partners
Minimum:	25 partners

1.1.5.2 The Laboratory will develop a mechanism to permit measurement of our ability to establish strategic research partnerships with other national laboratories, industry, and other national or international scientific organizations that enhance the Laboratory's science/technology mission. The data collected in FY99 will be used to establish a baseline for future years.

Performance Expectation Related Assumptions: The proposed mechanism(s) for collecting data will need to be finalized early in the first quarter of FY99 to ensure an accurate baseline can be captured.

Performance Expectation: Success against this indicator will be measured by:

- Definition of what will be measured completed in Q1FY99.
- Tracking mechanism established and agreed upon in Q1FY99.
- Baseline established by the end of FY99.

Performance Expectation: Does not contribute to score.

1.1.6 Results of DOE-SC Evaluation of the quality of science

Description: The Director of Energy Research will provide an evaluation to the DOE-RL Contracting Officer as to the quality of science conducted by the Contractor as input for this indicator. The rating will be based on the standard 5 step adjectival rating scale (Outstanding, Excellent, Good, Marginal, or Unsatisfactory).

Performance Expectation Related Assumptions: None

Performance:

Target:	Outstanding
Neutral:	Good
Minimum:	Unsatisfactory

1.2 Objective: Deliver Science and Technology Products Relevant to DOE Missions and National Needs (40%)

**Fundamental Science**

1.2.1 Results of DOE-SC evaluation of the relevance of Battelle's work to DOE Missions and Needs

Description: The Director of Energy Research will provide an evaluation to the DOE-RL Contracting Officer as to the relevance of the Contractor's work to DOE missions and needs as primary input for this indicator. The rating will be based on the standard 5 step adjectival rating scale (Outstanding, Excellent, Good, Marginal, or Unsatisfactory).

Performance Expectation Related Assumptions: None

Performance Rating:

Target:	Outstanding
Neutral:	Good
Minimum:	Unsatisfactory

1.2.2 The results of DOE-SC evaluation of the Laboratory's programmatic performance

Description: The Director of Energy Research will provide an evaluation as to the Contractor's scientific programmatic performance to the DOE-RL Contracting Officer as primary input for this indicator. The rating will be based on the standard 5 step adjectival scale (Outstanding, Excellent, Good, Marginal, or Unsatisfactory).

Performance Expectation Related Assumptions: None

Performance:

Target:	Outstanding
Neutral:	Good
Minimum:	Unsatisfactory

## Environmental Quality

### 1.2.3 Effectively lead the technical aspects of the national Tanks Focus Area

This Performance Indicator is a composite of three Performance Sub-indicators, designed to provide an overall evaluation of the Laboratory's effectiveness in leading the national Tank Focus Area.

#### Performance Expectations:

Target:	225
Neutral:	0
Minimum:	-250

#### 1.2.3.a Effective definition of technical solutions across the DOE complex

This performance indicator will measure the effectiveness of the TFA Technical Team in working with site users, technical advisors, and DOE-HQ to develop technology development recommendations that are responsive to the sites needs. The TFA Technical Team's multiyear technical response to site needs will be the subject of evaluation. The evaluation will take place after the technical response evaluation and prioritization meeting to be held in the mid-year time frame. The DOE TFA Management Team will evaluate the TFA Technical Team performance by means of a 10-point scale survey designed to enhance the resolution of performance evaluation (10 being the optimal score). The user will directly evaluate the technical team's performance on specific technology development processes. The subject survey will be developed jointly by DOE-RL and the TFA Technical Team. DOE-RL will issue and receive the results of the survey for analysis. The relationship between the survey scoring system and performance indicator expectations will be discussed and approved by RL prior to the issuance of the survey. The survey will be issued during the fourth quarter.

#### 1.2.3.b Adequate technology delivery to solve complex-wide problems

DOE-EM has set overall performance metrics for high-level waste for FY 1999 - 2001. The TFA supports these measures by providing technical solutions to the key problems associated with meeting these metrics. This performance indicator will include the accomplishment of demonstrations, deployments, and delivery of data needed to solve key site problems. The TFA has identified a number of site problems to be addressed in fiscal years 1999-2001. In addressing each problem, the TFA has planned activities in 1999 that will include either a demonstration of a technology, deployment of a technology, or delivery of data from testing.

A successful demonstration is defined as the completion of an activity that provides sufficient performance and cost data to enable the user to evaluate the technology against alternatives and to support a decision as to viability for deployment. A deployment is defined as testing of a new technology in the working environment. Data delivered refers to data from hot or cold demonstrations or laboratory testing that is used directly by sites to meet either regulatory, privatization, or design requirements. A listing of 20 equally weighted demonstrations, deployments or data to be delivered in FY99 has been prepared, agreed to, and will be maintained by DOE-RL and the Contractor.

Performance will be measured by percent of completion of planned demonstrations, deployments, and delivery of test data at end of year (example 18 completions out of 20 = 90%). Demonstrations, deployments and delivery of test data will each be identified by Technical Task Plan (TTP) number and by milestone identification number. Milestone

completion will be confirmed through concurrence letter to the site for whom the work was conducted.

When a potential demonstration, deployment or data to be delivered has been placed on the list, it cannot be removed from the list unless funding is cancelled or user schedule or commitment has changed. These changes will be captured through normal change control procedures.

#### 1.2.3.c Adequate tracking of technical progress to baseline

The TFA is concerned with and actively manages the cost and schedule performance of its technical activities. Technical progress as assessed by the TFA Technical Team is often the first indication of cost and schedule issues. The TFA Technical Team will identify technical issues that have cost and schedule impact, propose corrective actions, and coordinate corrective actions that will result in total carryover of less than 10%. This indicator will be measured by TFA FY 1999 year-end carryover. It is recognized that to meet this performance indicator that DOE-RL and the Laboratory will work as partners to carry out required changes.

#### 1.2.4 Effectively support the Hanford Tanks Privatization Effort

This Performance Indicator is a composite of three Performance Sub-indicators, designed to provide an overall evaluation of the Laboratory's effectiveness in supporting the Hanford Tanks Privatization Effort.

##### Performance:

Target:	250
Neutral:	0
Minimum:	-300

##### 1.2.4.a Provide leadership support for the successful implementation of the Phase I TWRS privatization through timely and high quality review and evaluation of BNFL, Inc. deliverables.

Description: An extended design phase for the Tank Waste Remediation System (TWRS) BNFL, Inc. contract has been negotiated. This design phase will commence in August 1998 and extend for 24 months. During this period, BNFL, Inc. will submit a number of deliverables that will be reviewed by DOE to determine if BNFL, Inc. is performing adequately and is likely to reach a satisfactory conclusion at the end of the design phase. The Laboratory will play a leading role in assisting DOE in the timely evaluation of the BNFL, Inc. deliverables by: defining the type of review/evaluation; planning and preparing for the review; conducting the review and evaluation; and documenting the evaluation results. The set of BNFL, Inc. deliverables upon which the Laboratory will be evaluated will be established by November 1, 1998.

This performance indicator will measure the effectiveness of the Laboratory's technical leadership in the evaluation of BNFL, Inc.'s deliverables.

Performance Evaluation: Up to ten major deliverables may be identified and agreed upon in FY1999 by the Waste Integration Team (WIT) and Waste Disposal Division (WDD) for this indicator, pending final negotiation of the scope and budget for FY 1999. These deliverables are significant to understand BNFL, Inc.'s technical, regulatory and business approach and assuring that BNFL, Inc. is completing the Part B-1 work as planned. Work to be formed by BNFL, Inc. during Part B-1 is: 1) optimize the Low Activity Waste (LAW) and High Level Waste (HLW) treatment and immobilization system,

mitigate risk, and reduce contingencies in the waste treatment and immobilization system defined by BNFL, Inc. in Part A; 2) revise the technical, operational, regulatory, and financial elements of the waste treatment services and immobilization system; 3) provide firm fixed-unit prices for waste treatment services; and 4) perform all activities necessary to reach financial closure for privatized facilities. An assessment questionnaire will be developed to be completed by the WDD manager to provide the data for WIT's performance against this indicator. This questionnaire will be completed by the WDD manager at mid-year and at the end of the year. For each deliverable, the questionnaire will address the following topics:

- Effectiveness of the planning/structuring of the deliverable evaluation;
- Effectiveness of the evaluation in supporting development of the final terms and conditions in the BNFL, Inc. Contract;
- Usefulness, completeness, and timing of evaluation results in influencing DOE's final negotiation of the Contract;
- Quality of documentation of any evaluation results; and
- DOE judgment of the importance and overall effectiveness of the Laboratory role in the evaluation of the major Part B-1 deliverables.

A scoring system will be developed for the questionnaire and agreed upon by WDD and WIT. Each deliverable will be evaluated on a 0 – 10 scale. The average will be calculated and multiplied by 10 to provide a 0-100 rating scale.

- 1.2.4.b Effectively support DOE's decision making by ensuring that key decisions are identified and analyzed, and that appropriate information is provided to DOE decision makers in a timely manner.

Description: For DOE to continue successfully with TWRS Privatization, a number of key decisions must be made during the design phase (approximately two years beginning August 1998). During FY 1999 key decisions are expected to include: technical optimization decisions; decisions as to the appropriate mix of financing; decisions regarding the development of methods needed for Contract H clauses (e.g., cost and schedule contingency effects on price, price adjustment mechanisms, etc.); and decisions pertaining to the selection of an alternative(s) for development into an executable alternative to the Privatization Contract for treating tank waste.

This performance indicator will measure the Laboratory's ability to establish an appropriate decision process for DOE, provide thorough analysis of the decision, and ensure the availability of the information needed for DOE to make the decisions.

Performance Evaluation: Up to 10 key decisions to be made in FY 1999 may be identified and agreed upon by WIT and WDD for this indicator, pending final negotiation of scope and budget for FY 1999 by the end of the 1<sup>st</sup> quarter FY 1999. These decisions will be ones of high importance to DOE and ones in which the Laboratory plays a key role. An assessment questionnaire will be developed to be completed by the WDD manager to provide the data for this performance indicator. This questionnaire will be completed by the WDD manager at mid-year and at the end of the year. The questionnaire will address, for each decision support activity, the following topics:

- Clearly articulating the decision to be made and effectiveness of the planning/structuring of the decision process;
- Effectiveness of analyses and information gathering performed to support the decision;
- Usefulness, completeness, and timing of information provided to DOE for making the decision;

- Appropriateness of any reviews of the analyses, information, and decision making process;
- Adequacy of the documentation of the decision; and
- DOE judgment of the importance and overall effectiveness of the Laboratory role in the decision.

A scoring system will be developed for the questionnaire and agreed upon by WDD and WIT. Each deliverable will be evaluated on a 0 – 10 scale. The average will be calculated and multiplied by 10 to provide a 0-100 rating scale.

**1.2.4.c Effectively support DOE in their effort to respond to unanticipated issues and informational requests on the TWRS Privatization Program.**

**Description:** TWRS Privatization is a multi-billion dollar project and therefore receives a significant amount of scrutiny from various government agencies, regulators, stakeholders and other special interest groups as well as DOE-HQ. DOE is continually faced with responding to unanticipated inquiries regarding the program. These inquiries may require responses ranging from a phone call responding to the inquiry to completion of an analysis and preparation of a detailed report or presentation. The Contractor's performance will be evaluated based on their ability to respond to unanticipated requests in a timely and high quality manner.

**Performance Evaluation:** Each half of the fiscal year, DOE-RL and Battelle may select up to two high-importance requests for which the Laboratory will be evaluated under this performance indicator with final approval by DOE-RL, pending final negotiation of scope and budget for FY 1999 by the end of the 1<sup>st</sup> quarter FY 1999. An assessment questionnaire will be developed for completion by the WDD manager to provide the data for Battelle's performance relative to these two requests plus Battelle's overall performance relative to responding to unanticipated requests. The questionnaire will address the following topics:

- Ability to allocate appropriate staff and subcontractor resources to responding to the requests;
- Effectiveness of analyses and information gathering performed in support of the response preparation;
- Timeliness of the response; and
- Adequacy of the documentation of the response, and DOE's judgement of the importance of the request and the overall effectiveness of the Contractor's role in responding to the request.

A scoring system will be developed and agreed upon by WDD and WIT to score each response on a 0 – 10 scale.

**1.2.5 Number of innovative technologies and approaches successfully deployed in commercial practice**

**Definitions:**

A **successful deployment** is defined as inclusion of the innovative technology as part of the user's baseline.

**Commercial practice** is defined as use by industry, DOE contractors, NOD contractors, or other licensees in routine practice as a part of their baseline suite of tools.

**Innovative technologies** are defined as technologies, approaches, or systems that demonstrate a significant advance in the state of the art or represent a new application of existing technology to a method or process with the result of improved cost, schedule, safety, and/or effectiveness. A

project that contains or has the potential to contain one or more of the following attributes (without adversely affecting the others) shall meet the criteria for innovative technology: 25% reduction in life cycle cost, 25% reduction in schedule, significant safety enhancement, and/or significant program risk reduction, and/or other criteria as defined by the user or their representative.

Innovative technologies held or offered "on the shelf" but not utilized in active practice are not acceptable under this definition.

A funded deployment is defined as inclusion of the innovative technology in a baseline activity that has been funded at a level agreeable to both the user and the Laboratory for performance of the task, for the full duration of the expected period of performance.

Establishment or a change to the baseline is defined as when an innovative technology deployment causes the user to change the existing baseline plan as a result of the deployment. A change to the baseline plan may occur a year or more after the completion of a deployment.

Description: This indicator will measure the transfer to a user of hardware, software, and methodologies for actual use in their field of application. This will measure the end result of a technically sound, user driven program.

Performance Expectation Related Assumptions: This indicator measures activities that have a significant time lag, that is, the deployments in FY 1999 will have been in process for 3-5 years in various stages of development. There will be an attribution of value for the activity. The relative value of deployments is reflected in the point system described below.

Performance Evaluation: The outcome of included activities will be documented in the "Milestone Status / Activity Acceptance and Completion" report format, which will include a brief description of the deployment, and the cost/economic and other benefits, that may be derived from its use. For EM-50 funded deployments, and where funds are provided, a report shall be prepared describing the innovative technology and the deployment and to convey results to other potential users. The report will also contain a life cycle cost benefit assessment; data from this analysis would be considered in the event incentive fee is earned as a result of the deployment (incentive fee must not exceed benefit to the government resulting from activity).

A point system will be used to evaluate performance against this indicator:

- Two points will be awarded for each time an innovative technology or approach is deployed at Hanford or another DOE site or on a particular DOE waste stream at other locations (e.g., Privatization contractors).
- One point will be awarded each time an innovative technology or approach is deployed at separate non-DOE government sites or at commercial or private sites.
- Two additional points will be awarded each time a technology deployment results in the user's establishment of a new baseline plan at Hanford or another DOE site.
- Maximum lifetime points awarded for a specific technology will be 10 for Hanford or DOE site deployments, and five for non-DOE government sites or commercial sites, for a total maximum of 15 points.
- Different applications of the same technology or approach for different source problem will constitute a separate deployment.
- Business Sensitive deployments will be verified with the customer under the appropriate non-disclosure agreement.

**Performance:**

<b>Target:</b>	<b>16 Points</b>
<b>Neutral:</b>	<b>6 Points</b>
<b>Minimum:</b>	<b>0 Points</b>

**1.2.6 Provide significant solutions to Hanford problems/needs**

**Description:** This indicator will measure and enhance the focus of Contractor activities in addressing Hanford science needs and technical gaps conducted at the request of the client. First, the Contractor will evaluate the science and technology needs at Hanford as developed by the ERC, PHMC, and Site Technology Coordination Group (STCG) to identify the basic research, applied research, advanced development, demonstration requirements, and deployment opportunities. This information will be used to address OER, EM, NAS, Focus Area, etc., questions on Hanford Science and Technology needs, identify critical research areas needing investigation, and to provide an opportunity for partnerships with DOE-RL, industry, and academia. Contractor activities in support of PHMC, ERC, DOE and STCG technology assessment, evaluation, and insertion will be applied to this performance indicator. Activities undertaken are to be of a technical nature rather than purely administrative and may include technical and engineering services, studies and consultations. The resulting products may be engineered solutions, new approaches to addressing existing problems, new technologies, improvements to existing approaches or technologies, and adaptations and/or applications of technologies or approaches developed elsewhere. Problems that may be addressed by Hanford technical solutions are not limited to environmental restoration or waste management, but may include any of the scientific, technical, and engineering issues facing DOE-RL and its contractors. These activities may be those that: 1) reduce technical uncertainty, 2) address safety questions, 3) provide process improvement, 4) identify, evaluate and recommend innovative technologies, 5) provide technology assessments, 6) submit proposals that address the STCG, EM programmatic, and EM science needs at Hanford.

**Performance Expectation Related Assumptions:** Currently, the Laboratory is solving Hanford problems in a number of areas; however, DOE-RL wants the Laboratory to continue the emphasis on Hanford technical solutions.

**Performance Evaluation:** The number of expected activities will be established and discussed with DOE-RL. The main focus of this metric should be on Laboratory technical input to Hanford operating elements such as engineering requests, etc. The results of the activities performed to meet the required performance will be documented, by providing DOE-RL the following information:

- Identification of a specific DOE-RL or contractor client
- A description of the problem or need being addressed
- A description of the approach/activities the Contractor undertook to address the need or problem

A point system will be used to evaluate performance against this indicator. Based on DOE-RL's review, points will be awarded as follows:

- One point will be allocated for each project completed for Hanford clients that produce a technical product such as a report or other technical deliverable during the year. One point will also be awarded each new EM-50 task that addresses one or more Hanford needs, and ½ point will be awarded for each continuing EMSP task that addresses one or more Hanford needs.
- Proposals prepared by the Contractor, where required to address Hanford problems and environmental technology needs, will be allocated ½ point each.



- DOE-RL may award additional credit for completion of particularly significant activities as deemed appropriate by DOE-RL; however, the maximum points awarded for one activity will be 5.
- No items will be included on this list that are also included as a deployment.

**Performance:**

Target: 75 Points  
Neutral: 35 Points  
Minimum: 0 Points

**1.2.7 Customer Feedback on relevance and excellence in Environmental Quality Mission Areas**

**Description:** Customer feedback from program/technical clients will be obtained through the use of a survey. The survey is designed to solicit feedback along two dimensions: a) the strategic value of the work to the customer, and b) project performance, i.e., how well the Laboratory is performing work on the project. The objective of this indicator is to change behavior related to achieving higher levels of customer satisfaction along both dimensions and to minimize the variability of responses by resolving less-than-satisfied levels of project performance.

The Laboratory Sub-sector Leaders, Account Managers and Product Line Managers will identify the set of critical 1830 projects to be surveyed in each mission area. The DOE-RL Director of Science & Technology Programs will approve the list of critical projects.

The survey will be sent to the customer jointly by the RL Assistant Manager for Science and Technology and the Laboratory Director. Surveys will be returned to the Contractor with a copy provided to RL upon request. In order to obtain the highest possible response rate, customers who do not initially return the survey will be contacted using a process similar to the one established in FY 1998.

The survey will use a 5 point rating scale along each dimension and will also provide the customer with the opportunity to provide written comments. This indicator will address the following:

- The overall average score (rounded to the nearest 0.1) for each of the two dimensions (i.e., strategic value and project performance) for all projects surveyed within each mission area with the points summed for both dimensions and
- The variability of the average score for each project in the project performance dimension for each mission area.

If the variability (as measured by the standard deviation) for a mission area increases from the FY 1998 baseline, the total effectiveness points earned from the overall average score will be reduced by 25% of the target effectiveness score.

**Performance:**

Target: 8.5  
Neutral: 6.0  
Minimum: 5.0

## National Security

### 1.2.8 Number of solutions and deployments to significant national security problems/issues

Description: It is the objective of the National Security Division to provide deployable solutions that meet a variety of national and international security needs. The pathway to accomplishing this first involves the ability to develop solutions to problems identified by the client. The solutions provided then form the pool from which deployments can be made at either a "local" level, or the national/international "global" level.

The scope identified for this Performance Indicator is to achieve any combination of contributions at the solution or deployment (local or global) level. Those deployments that solve national / international security problems would contribute more than deployments at a local level, and local deployments would contribute more than non-deployed solutions.

#### Definitions:

Solution: Activities undertaken are to be of a technical or policy-making nature, rather than administrative, and may include technical and engineering services, studies and consultations. The resulting products may be: knowledge provided to make a decision, engineered solutions, new approaches to addressing existing problems, new technologies, improvements to existing approaches / technologies, and adaptations &/or applications of technologies or approaches developed elsewhere. These activities may be those that reduce technical uncertainty, address safety questions, provide process improvements, identify, evaluate and recommend innovative technologies, provide technology/policy assessments, and must meet a defined client need or requirement.

Deployment: Inclusion of the solution as part of the user's system.

(Deployment) Local: A solution applied at, typically, a single site/location to address the client's originally-identified and focused problem. Local deployments may be: knowledge provided to make a decision, services or reports provided which results in a change in the way client does business, deployments significant to local/state security issues, or are a significant achievement in a project's lifecycle. The number of "local" deployments will be more numerous than global deployments.

(Deployment) Global: A solution applied at, typically, multiple sites/locations to address national / international issues/needs. Note: the number of "global" deployments to national security problems in any year will be quite small - these projects can take anywhere from 3-10 years work to achieve results at the national/international level, and these will be worth significantly more points for purposes of this performance indicator.

Performance Expectation Related Assumptions: The two "global" deployments from FY98 alone are insufficient to establish an adequate baseline for the expanded scope of the measure in FY99. "Local" deployments and solutions in FY98 were investigated in order to establish a target and expected goal for FY99. However, this year should be considered the first in establishment of a baseline for this augmented measure compared with FY98.

Process: The process will be interactive and iterative between the DOE-RL and Contractor contacts.

An "Activity Acceptance and Completion Form" must be filled out for each technology, policy/service and technical solution to be considered for solution/deployment, and submitted to DOE-RL for concurrence. This form will contain identification of the client, a brief description of the solution / deployment and the approach and activities used to develop the solution / deployment, the client need or requirement, and a description of the benefits that may be derived

from its use. This form will be initially submitted to DOE-RL for concurrence that the solution / deployment proposed meets the definitions as outlined in this performance indicator. The final submittal of this form will occur when the solution/ deployment has been completed, for DOE-RL's concurrence and awarding of points.

A point system will be used to evaluate performance against this indicator:

- One point will be awarded for each time a proposed solution meets a client need or requirement.
- A total of three points will be awarded for a local deployment (Two additional points will be awarded for each time a solution results in a local deployment.)
- And a maximum of seven points will be awarded for a global deployment (Four additional points will be awarded for each time a local deployment gains global deployment status, or six points for a solution reaching global deployment status without first reaching local deployment status.)
- No more than seven points possible for any deployment.

Different applications of the same technology or approach for different source problems will constitute a separate deployment.

Performance:

Target:	38
Neutral:	18
Minimum:	0

#### 1.2.9 Customer Feedback on relevance and excellence in National Security Mission Areas

**Description:** Customer feedback from program/technical clients will be obtained through the use of a survey. The survey is designed to solicit feedback along two dimensions: a) the strategic value of the work to the customer, and b) project performance, i.e., how well the Laboratory is performing work on the project. The objective of this indicator is to change behavior related to achieving higher levels of customer satisfaction along both dimensions and to minimize the variability of responses by resolving less-than-satisfied levels of project performance.

The Laboratory Sub-sector Leaders, Account Managers and Product Line Managers will identify the set of critical 1830 projects to be surveyed in each mission area. The DOE-RL Director of Science & Technology Programs will approve the list of critical projects.

The survey will be sent to the customer jointly by the RL Assistant Manager for Science and Technology and the Laboratory Director. Surveys will be returned to the Contractor with a copy provided to RL upon request. In order to obtain the highest possible response rate, customers who do not initially return the survey will be contacted using a process similar to the one established in FY 1998.

The survey will use a 5 point rating scale along each dimension and will also provide the customer with the opportunity to provide written comments. This indicator will address the following:

- The overall average score (rounded to the nearest 0.1) for each of the two dimensions (i.e., strategic value and project performance) for all projects surveyed within each mission area with the points summed for both dimensions and
- The variability of the average score for each project in the project performance dimension for each mission area.

If the variability (as measured by the standard deviation) for a mission area increases from the FY 1998 baseline, the total effectiveness points earned from the overall average score will be reduced by 25% of the target effectiveness score.

**Performance:**

Target:	8.5
Neutral:	6.0
Minimum:	5.0

**Energy Resources**

**1.2.10 Number of energy technologies, systems and technical solutions deployed**

Description: Moving technology, systems, and technical solutions from the laboratory to ultimate deployment is a critical part of furthering the programmatic and strategic objectives of DOE (ST2-2). This performance objective focuses on moving energy-related technology to practice and will count the number of energy-related technologies, systems, and technical solutions (software, analytic tools, and methodologies) ultimately deployed. Performance will be measured by counting the number of deployments (defined below) achieved.

For a deployment to be counted against this indicator, the following conditions must be met:

- An "Activity Acceptance and Completion Form" must be filled out for each technology, system and technical solution that is to be considered as deployed, and submitted to DOE-RL for concurrence. This form will define the following as applicable: the technology being deployed, the deployment partner, the deployment vehicle, the application, and conditions/circumstances of deployment.
- Have an Energy-related application, which generally supports the DOE Energy Resources missions.

Deployment mechanisms that will be counted are the following:

- Signed government use agreement
- Signed commercial nonexclusive license agreement
- Signed commercial exclusive license agreement
- Signed commercial license agreement with an equity position
- Assignment/assumption of title for technology (e.g., direct sale of technology)
- Technology used in Government Facilities
- Technology field tested/demonstrated in Government Facilities

Performance Expectation Related Assumptions: None

Performance: The total number of deployments achieved will result in the following rating for this performance indicator.

<u>Performance Level</u>	<u>Number of Deployment</u>
Target:	3
Neutral:	1
Minimum:	0

1.2.11 Customer Feedback on relevance and excellence in Energy Mission Areas

Description: Customer feedback from program/technical clients will be obtained through the use of a survey. The survey is designed to solicit feedback along two dimensions: a) the strategic value of the work to the customer, and b) project performance, i.e., how well the Laboratory is performing work on the project. The objective of this indicator is to change behavior related to achieving higher levels of customer satisfaction along both dimensions and to minimize the variability of responses by resolving less-than-satisfied levels of project performance.

The Laboratory Sub-sector Leaders, Account Managers and Product Line Managers will identify the set of critical 1830 projects to be surveyed in each mission area. The DOE-RL Director of Science & Technology Programs will approve the list of critical projects.

The survey will be sent to the customer jointly by the RL Assistant Manager for Science and Technology and the Laboratory Director. Surveys will be returned to the Contractor with a copy provided to RL upon request. In order to obtain the highest possible response rate, customers who do not initially return the survey will be contacted using a process similar to the one established in FY 1998.

The survey will use a 5 point rating scale along each dimension and will also provide the customer with the opportunity to provide written comments. This indicator will address the following:

- The overall average score (rounded to the nearest 0.1) for each of the two dimensions (i.e., strategic value and project performance) for all projects surveyed within each mission area with the points summed for both dimensions and
- The variability of the average score for each project in the project performance dimension for each mission area.

If the variability (as measured by the standard deviation) for a mission area increases from the FY 1998 baseline, the total effectiveness points earned from the overall average score will be reduced by 25% of the target effectiveness score.

Performance:

Target:	8.5
Neutral:	6.0
Minimum:	5.0

1.3 Objective: Successfully operate the Wiley Lab and ARM Facilities (10%)

Actual performance on subindicators supporting 1.3.1 and 1.3.2 will be recorded onto Table 1.3 under performance level. The corresponding effectiveness scores from the subindicators under 1.3.1 and 1.3.2 are additive and will be recorded onto Table 1.3. These effectiveness scores then become the performance level scores at the indicator level for 1.3.1 and 1.3.2 and are recorded as such onto Table 1.4. The effectiveness scores are then derived from Figure 1E. Final value point assignment is derived using Table 1.6.

1.3.1 Successful operation of the Wiley Laboratory

This performance indicator reflects the mission of the Wiley Laboratory as a user facility; the research mission of the Wiley Laboratory is addressed in other sections of Critical Outcome 1.0. The indicator is a composite of three sub-indicators. The sub-indicators will be rolled up into a numerical score based upon a continuous scale of -100 to 300 as follows:

- 300 points represents the target performance level
- 100 points represents the neutral performance level
- -100 points represents the minimum performance level

1.3.1.1 Number of users of the Wiley Lab.

**Description:** This performance indicator measures the number of non-EMSL organization staff users of the Wiley Lab in FY99 relative to baseline data measured in FY98. The data will be reported as number of local, regional, national or international users from academic institutions, government laboratories or private industry. The data on users will be summarized in the quarterly critical outcome presentations. A final report for the appropriate DOE/HQ program managers will also be prepared for their information and action.

**Performance Expectation Related assumptions:** The number of non-EMSL users is expected to exhibit significant growth relative to FY98.

**Performance Expectation:** Growth in the number of non-EMSL users by 20% will be worth 100 points, growth of 15% will be worth 90 points, growth of 10% will be worth 50 points, growth of 5% will be worth 0 points; and growth less than 5% will be worth -50 points.

1.3.1.2 Number of peer-reviewed publications from use of the Wiley Lab by non-PNNL staff.

**Description:** This performance indicator measures the number of peer reviewed publications in FY99 resulting from use of the Wiley Laboratory in FY99 or previous years. Data will be collected on peer-reviewed publications resulting from collaborative or independent use of the Wiley Lab. Comparison of publications by type of user will be summarized in the quarterly critical outcome presentations. A final report for the appropriate DOE/HQ program managers will also be prepared for their information and action.

**Performance Expectation Related Assumptions:** The number of peer reviewed publications in FY99 resulting from use of the Wiley Lab by non-PNNL staff is expected to exhibit growth relative to FY98. However, since the number of peer-reviewed publications depends on activities in previous years, we anticipate that the growth in peer-reviewed publications will be slower than growth in number of users and programmatic funding.

**Performance Expectation:** Growth in the number of peer-reviewed publications with non-EMSL authors by 15% will be worth 100 points, growth of 10% will be worth 90 points, growth of 5% will be worth 80 points, growth of 0% will be worth 0 points, and growth less than 0% will be worth -50 points.

1.3.1.3 User satisfaction.

**Description:** This performance indicator measures the level of satisfaction of users of the Wiley Lab. A User Satisfaction Survey was developed in FY 1998 and sent to all non-EMSL staff who used the Wiley Lab in FY 1998. This data will be analyzed in the 2<sup>nd</sup> quarter of FY 1999 and an action plan will be prepared describing actions to be taken to address those areas where users indicated dissatisfaction. The analysis and the action plan will be presented at the 2<sup>nd</sup> quarter critical outcome presentation. A final report will be prepared for the appropriate DOE/HQ program managers for their information and action in the 3<sup>rd</sup> quarter of FY 1999. If necessary, the survey will be modified in the 3<sup>rd</sup> quarter of FY99 with participation and approval by DOE and any changes will be reported at the 3<sup>rd</sup> quarterly critical outcome presentation. The FY 1999 User

Satisfaction Survey will be sent to all non-EMSL staff who used the Wiley Lab in FY 1999 before the end of FY 1999 and the necessary steps will be taken to ensure survey results will be available by November 1, 1999 for DOE-RL use in the FY 1999 performance evaluation.

Performance Expectation Related Assumptions: N/A

Performance Expectation: Completion of all activities described above will serve as a gateway to positive scoring for this indicator (a score of 0 will be earned if any of the above activities are not completed).

In addition to essay questions, the survey will utilize customer feedback questions addressing satisfaction with aspects of their experience at/with the Wiley Lab. These feedback questions will have 5 ranges of response: very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied. The results of the user survey will determine score provided there is completion of gateway activities. If the review of user responses to survey questions reveals the majority (greater than 50%) of question responses indicate satisfied or very satisfied and further, greater than 17% indicate very satisfied, this will earn 100 points. If the majority of responses indicate satisfied or very satisfied but 17% or less indicate very satisfied, this would earn a rating of 90 points. If greater than 50% of the question responses indicate satisfaction and neither satisfied nor dissatisfied, this will earn a rating of 50 points. If only 30 to 50% of the question responses indicate satisfaction or neither satisfied nor dissatisfied, this will earn a rating of 25 points. Less than 30% of responses indicating satisfaction and/or neither satisfied nor dissatisfied earns 0 points.

### 1.3.2 Operation of Atmospheric Radiation Measurement (ARM) Extended Research Facilities

The Contractor manages the day to day operations of three ARM Extended Research Facilities for the Department of Energy. These facilities observe a variety of atmospheric variables for the purpose of improving the performance of global climate models. Measurement strategies are designed to meet the specific needs of ARM Science Team Members, whose role is to meet the scientific objectives of the ARM Program. Science Team Members are funded through a competitive process run by the ARM Program Manager who is located in Germantown, Maryland. The ARM Program Manager determines the number of Science Team projects, and it is based on the quality of proposals received in response to periodic solicitations and on available funding. In addition, ARM data are available to non-ARM funded researchers through the ARM Data Archive located at Oak Ridge National Laboratory. The indicator is a composite of two sub-indicators. Each sub-indicator will be rolled up into a numerical score based upon a continuous scale of -30 to 200 as follows:

- 200 points represents the Target performance level
- 80 points represents the Neutral performance level
- -30 points represents the minimum performance level

#### 1.3.2.1 Number of peer-reviewed publications based on ARM data

Description: The purpose of ARM is to advance understanding of radiative energy transfer in the atmosphere (and particularly the role of clouds, water vapor, and aerosols on this process) and how changes in this process effect atmospheric dynamics. A principal goal is to translate this new knowledge into improved parameterization schemes for climate models.

Number of peer-reviewed publications based on ARM data: An important measure of ARM performance is its scientific productivity in terms of papers appearing in peer-reviewed scientific journals that are based on or use ARM data and the influence ARM

science is having on process parameterizations in climate models. ARM scientific productivity is an indirect measure of Battelle's performance in managing the day to day operations thus Battelle's performance in this area will be measured as the productivity of all ARM Science Team projects.

**Performance Expectations:** For FY 1999, an annual publication growth rate of greater than or equal to 10% as compared to FY 1998 will be worth 100 points, no change will be worth 80 points, greater than or equal to -10 will be worth 0 points, greater than or equal to -20 will be worth -15 points, and less than -20 per year will result in -30 points.

#### 1.3.2.2 User satisfaction.

**Description:** This performance indicator measures the level of satisfaction of ARM-funded users of the ARM Facility. A user baseline will be established to determine appropriate survey recipients. A User Satisfaction Survey will be developed and sent to all non-PNNL members of the ARM Science Team who used the facility in FY99. The survey will be developed and submitted for DOE approval by the end of the 2<sup>nd</sup> quarter of FY99. The User Satisfaction Survey will be sent to all non-PNNL members of the ARM Science team before the end of FY99 and the necessary steps will be taken to ensure survey results will be available by November 1, 1999 for DOE-RL use in the FY99 performance evaluation.

**Performance Expectation Related Assumptions:** Completion of all activities described above will serve as a gateway to scoring for this indicator (a score of 0 will be earned if any of the above activities are not completed).

**Performance:** The survey will utilize customer feedback questions addressing satisfaction with the ARM facility. These feedback questions will have 5 ranges of response: very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied, very dissatisfied. The results of the user survey will determine score provided there is completion of gateway activities. If the review of user responses to survey questions reveals the majority (greater than 50%) of question responses indicate satisfied or very satisfied and further, greater than 17% indicate very satisfied, this will earn 100 points. If the majority of responses indicate satisfied or very satisfied but 17% or less indicate very satisfied, this would earn 90 points. If greater than 50% of the question responses indicate satisfaction or neither satisfied nor dissatisfied, this will earn 50 points. If only 30 to 50% of the question responses indicate satisfaction or neither satisfied nor dissatisfied, this will earn 25 points. Less than 30% of responses indicating satisfaction and/or neither satisfied nor dissatisfied will earn 0 points.

#### 1.3.3 Results of DOE-SC evaluation of the quality of the Laboratory's User Facilities

**Description:** The Director of Energy Research will provide an evaluation as to the quality of the Contractor's operations of Laboratory User Facilities to the DOE-RL Contracting Officer as primary input for this indicator. The rating will be based on the standard 5 step adjectival scale (Outstanding, Excellent, Good, Marginal, or Unsatisfactory).

**Performance Expectation Related Assumptions:** DOE-HQ overall evaluations were not a specific part of the Battelle Critical Outcomes in the past, although those evaluations were considered when assigning a final rating to the Contractor.

**Performance Rating:**

Target:	Outstanding
Neutral:	Good
Minimum:	Unsatisfactory



- 1.4 **Objective:** Demonstrate leadership and excellence in program planning and management for critical outcomes (25%)

**Fundamental Science**

- 1.4.1 Demonstrate programmatic leadership within Fundamental Science

Description: The Environmental and Health Sciences Division of the Laboratory provides leadership to the following six major initiatives:

- EMSL- Wiley User Facility
- NABIR
- ARM
- JCI- Joint Catalysis Institute
- CCPP/ACPI- the Accelerated Climate Prediction Initiative (within the Climate Change Prediction Program)
- SSI- Strategic Simulation Initiative

This indicator is designed to provide a feedback mechanism regarding Battelle's ability to demonstrate strong and effective leadership to the initiatives it manages.

Approach: A program composite will be developed based upon interviews with those responsible for overall program oversight and direction (i.e., directed at a level above Program management for each initiative). The interviews will address the following critical questions relating to, or indicating dimensions of, leadership (includes weighting for each dimension).

- How would you rate the *quality of leadership* provided by Battelle? (40% of final rating),
- How would you rate Battelle's *ability to effectively team with other laboratories and universities*? (20% of final rating),
- How would you rate the *degree of Laboratory Institutional (management, administration, funding, etc.) support to leadership* of these programs? (20% of final rating), and
- How would you rate the *overall program quality*? (20% of final rating).

A representative from EHSD and DOE-RL will conduct joint interviews. The questions presented above, are designed to elicit feedback on both the positive aspects of leadership demonstrated as well as those areas that warrant improvement if a sound relationship with the customer is to continue. By the end of January FY 1999, the Laboratory and DOE-RL will jointly:

- Identify customers to be interviewed in advance of conducting any interviews.
- Develop a general interview schedule for the year.
- Develop the interview protocol and evaluation scheme for each interview and for consolidating these into a single rating.

Performance Expectation Related Assumptions: The final rating along each dimension will be rated on a scale of 1 to 5, with 5 representing outstanding performance. Both DOE-RL and EHSD will determine these ratings with final approval by DOE-RL.

Performance:

The final composite rating across all dimensions will be as follows:

- 5.0 represents the target performance level
- 3.0 represents the neutral performance level

- 1.0 represents the minimum performance level

## Environmental Quality

### 1.4.2 Demonstrate programmatic leadership in Environmental Quality

Description: The Environmental Technologies Division of the Laboratory provides leadership to the following major initiatives:

- EM S&T Roadmapping
- Long-Range Stewardship and Risk-Based Decision Making

This indicator is designed to provide a feedback mechanism regarding Battelle's ability to demonstrate strong and effective leadership to the initiatives it manages.

Approach: A program composite will be developed based upon interviews with those responsible for overall program oversight and direction (i.e., directed at a level above Program management for each initiative). The interviews will address the following critical questions relating to, or indicating dimensions of, leadership (includes weighting for each dimension).

- How would you rate the *quality of leadership* provided by Battelle? (50% of final rating),
- How would you rate Battelle's *ability to effectively team with other laboratories and universities*? (20% of final rating),
- How would you rate the *degree of Laboratory Institutional (management, administration, funding, etc.) support to leadership* of these programs? (20% of final rating), and
- How would you rate the *overall program quality*? (10% of final rating).

A representative from ETD and DOE-RL will conduct joint interviews. The questions presented above are designed to elicit feedback on both the positive aspects of leadership demonstrated as well as those areas that warrant improvement if a sound relationship with the customer is to continue. By the end of the first quarter of FY99, the Laboratory and DOE-RL will jointly:

- Identify customers to be interviewed in advance of conducting any interviews.
- Develop a general interview schedule for the year.
- Develop the strategic objectives emphasizing the development and up-front planning of the programs.
- Develop the interview protocol and evaluation scheme for each interview and for consolidating these into a single rating.

Performance Expectation Related Assumptions: The initiatives evaluated will be based upon availability of the target agreed upon interviewers and interviewees.

The final rating along each dimension will be rated on a scale of 1 to 5, with 5 representing outstanding performance. Both DOE-RL and ETD will determine these ratings with final approval by DOE-RL.

Performance:

The final composite rating across all dimensions will be as follows:

- 5.0 represents the target performance level
- 3.0 represents the neutral performance level
- 1.0 represents the minimum performance level

1.4.3 Effectively lead the technical aspects of the Groundwater and Vadose Zone Integration Project

1.4.3.a Develop scientific and technical basis that support key decisions and actions

**Description:** This indicator will measure Battelle's leadership in the Integration Project for bringing science and technology to bear on key issues and gaps in knowledge, understanding, scientific data, and tools. The management structure for identifying and implementing science and technology will be the S&T Roadmap. Roadmapping is a process in which the problem holders and problem solvers are brought together to meet mission objectives through S&T (as it is needed). Battelle will be responsible for putting the process in place and leading it. The process includes maintaining participation of experts from multiple laboratories, interactions with project managers and their technical staff in both the definition and implementation phases of the roadmap, and coordination of work being conducted by both Hanford and National S&T programs.

The measure of this performance indicator is the evaluation of the S&T roadmap and the process for defining and implementing the roadmap that leads to incorporation of S&T into the project. The DOE Integration Project team will use a point system to evaluate performance of Battelle. Full point value will be given for meeting quality, schedule, and cost requirements for the performance indicator; not meeting any one of these requirements can result in a proportionate reduction of awarded points. The S&T performance measure is subject to change control through the normal Integration Project change control process.

Performance Expectation Related Assumptions: None

Performance:

**Timeliness and Adequacy of Products**

- S&T Roadmap revisions for the inventory, vadose zone, groundwater, and river technical elements will be completed by June 30 in conjunction with the Project Specification schedule
- S&T Roadmap revisions will adequately respond to Expert Panel comments

**Prioritization of S&T Activities**

- S&T prioritization process will be completed and used in setting FY00 funding investments for S&T

**S&T Activities Responsive to Integration Project Needs**

- S&T team will provide adequate information for decision on S&T investments
- S&T team will provide requests to SCFA for FY00 and FY01 funding for key task area

**Implementation of S&T Roadmap**

- FY00 S&T DWP will adequately define new S&T tasks for Oct 1 startup
- S&T team will make progress in showing the linkage of specific S&T tasks to the Project's and the Systems Assessment Capability's long-range plans.
- Assuming authorization for a May start, preparation of detailed work plans for the Vadose Zone Transport Field Study will be completed for FY00 startup (bonus point)

1.4.3.b Develop a system assessment capability (SAC) that becomes a tool for key decisions and actions

This indicator will measure Battelle's technical leadership in the development and implementation of a system assessment capability. The goal is to develop a capability that is credible with the regulator, stakeholder, Tribal Nation, and scientific communities. It is recognized that these diverse communities will have different and sometimes opposing expectations, values, and requirements. Hence, a process that is deemed by the DOE to have adequate, open participation is needed to allow open discussion of multiple views. Battelle will lead an open process in FY99 that results in the development of a strategy, long range plan, and the basis for systems requirement for the SAC.

The measure of this performance indicator is the determination by DOE that the long-range plan and steps leading to a set of system requirements have been developed adequately and that they were developed using an open process to collect a broad set of input in the formulation of the systems requirements. The DOE Integration Project team will use a point system to evaluate performance of Battelle. Full point value will be given for meeting quality, schedule, and cost requirements for the performance indicator; not meeting any one of these requirements can result in a proportionate reduction of awarded points. The SAC performance measure is subject to change control through the normal Integration Project change control process.

Performance Expectation Related Assumptions: None

Performance:

Interaction/Integration

- The long-range plan will identify interfaces between SAC, S&T, core projects, and policy and regulatory work groups and subsequently, definition of data and other requirements from S&T, projects, and policy and regulatory work groups will be adequately developed for use in FY00 planning

Timeliness of Products

- Complete strategic and long-range plan for SAC by June 30
- Complete candidate sets
- Complete inventory and risk scoping studies (a)
- Complete environmental pathway conceptual model white papers (a)
- Complete preliminary SAC requirements (a)

(a) Full award for this measure is 3 points. All other measures are 1 point awards unless otherwise indicated. Up to a total of six additional bonus points can be assigned to any measure, or combination of measure, where DOE feels outstanding performance was demonstrated.

## National Security

### 1.4.4 Customer Feedback on Leadership for key National Security Programs

Description: The National Security Division of the Laboratory provides leadership and key technical contributions to the following DOE national security strategic goals:

- Ensure and enhance protection of nuclear materials, sensitive information and facilities.
- Provide DOE-related intelligence and threat assessment support to members of the national security community.
- Reduce inventories of surplus weapons-usable fissile materials worldwide in a safe, secure, transparent, and irreversible manner.

- Strengthen the nuclear nonproliferation regime through support of treaties and international agreements.
- Work with the states of the former Soviet Union and others to minimize the risks of proliferation
- Advance nonproliferation technology.
- Assist countries in reducing the risks from Soviet-designed nuclear power plants and implement a self-sustaining nuclear safety improvement program capable of reaching internationally accepted safety practices.
- Assist in the multi-national effort to shut down Chernobyl Units 1, 2, and 3 in the Ukraine and reduce the risk of possible collapse of the Unit 4 sarcophagus.

The Laboratory National Security Division Associate Laboratory Director and DOE-RL will conduct joint interviews of key DOE customers in the above programmatic areas to collect feedback on Battelle's performance in demonstrating technical and managerial leadership. By the end of the first quarter of FY99, the Laboratory and DOE-RL will jointly:

- Identify customers to be interviewed in advance of conducting any interviews.
- Develop a general interview schedule for the year.
- Develop interview questions around the strategic goals to be achieved in advance of the interviews.
- Develop the interview protocol and evaluation scheme for each interview and for consolidating these into a single rating.

#### Performance Expectation Related Assumptions:

The initiatives evaluated will be based upon availability of the agreed upon interviewers and interviewees.

The final rating will be based on a scale of 1 to 5, with 5 representing outstanding performance. Both DOE-RL and NSD will determine these ratings with final approval by DOE-RL.

Performance: The final composite rating across all dimensions will be as follows:

- 5.0 represents the target performance level
- 3.0 represents the neutral performance level
- 1.0 represents the minimum performance level

#### Energy Resources

##### 1.4.5 DOE customer feedback on technical and managerial leadership in the Energy thrust areas

Description: A representative from the Laboratory Energy Division and DOE-RL will conduct joint interviews of key DOE customers in the four Energy thrust areas (i.e., Efficient Vehicles and Automotive Structures; Intelligent Building Systems; Engineering Simulation and Modeling - Virtual Prototyping; Fuel Systems Technology) to collect feedback on Battelle's performance in demonstrating technical and managerial leadership. By the end of the first quarter FY 1999, the Laboratory and DOE-RL will jointly:

- Identify customers to be interviewed in advance of conducting any interviews.
- Develop the interview schedule for the year.
- Develop interview questions around the strategic objectives to be achieved in the thrust areas in advance of the interviews.
- Develop the interview protocol/script and evaluation scheme for each interview and for consolidating these into a single rating.

**Performance Expectation Related Assumptions:**

The initiatives evaluated will be based upon availability of the agreed upon interviewers and interviewees.

The final rating will be based on a scale of 1 to 5, with 5 representing outstanding performance. Both DOE-RL and NSD will determine these ratings with final approval by DOE-RL.

**Performance:** The final composite rating across all dimensions will be as follows:

- 5.0 represents the target performance level
- 3.0 represents the neutral performance level
- 1.0 represents the minimum performance level

**1.4.6 Number of formal agreements (e.g., CRADAs, MOUs, non-government contracts, and other formal agreements and expressions of interest) established between October 1, 1998 and September 30, 1999 with private sector entities**

**Description:** Formal agreements must meet the following criteria to be accepted as performance against this indicator:

- Agreements directly address one of the four thrust areas described above (Efficient Vehicles and Automotive Structures, Intelligent Building Systems, Engineering Simulation and Modeling – Virtual Prototyping, and Fuel Systems Technology).
- Technical scope of the agreement must be focused on a specific objective with clearly defined deliverables.
- The agreement partner must contribute at least 25% of the total dollar value of the relationship either as funding or in-kind contributions.

Agreements that existed prior to October 1, 1998 that are renewed, extended, or otherwise amended in terms of scope, level of effort, commitment of resources, or deliverables for performance in FY99 may count under this indicator as long as DOE-RL and the Laboratory concur that they meet the above criteria, and are substantially revised.

**Performance Expectation Related Assumptions:** None

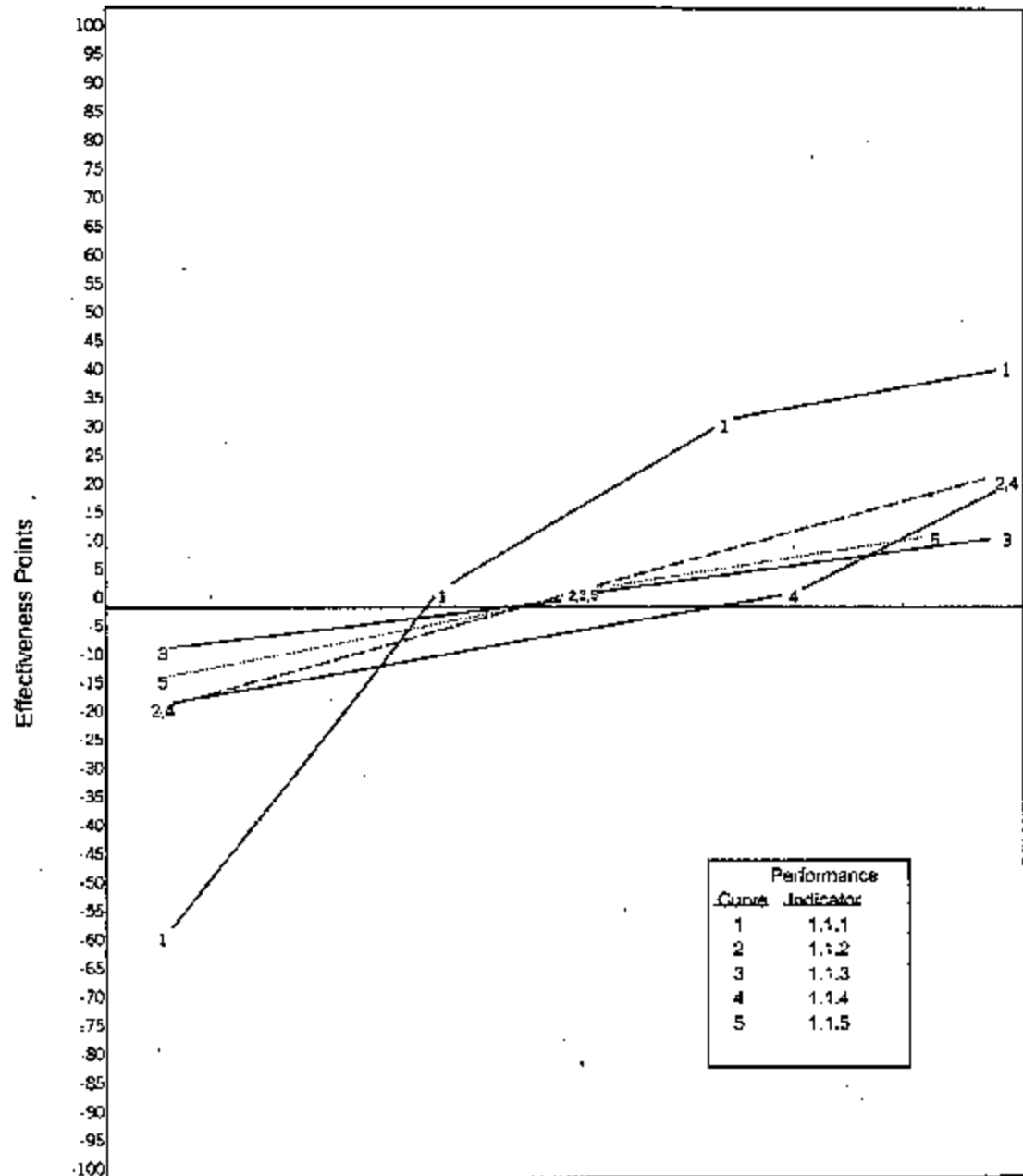
**Performance:** Number of Agreements meeting the above conditions.

<u>Performance Level</u>	<u>Number of Agreements</u>
Target:	9
Neutral:	5
Minimum:	1

**Critical Outcome Performance Rating and Additional Performance-Based Fee**

Figures 1A, 1B, 1C, 1D, 1E, 1F, 1G and 1H document the associated agreements on performance expectations in the form of contingency functions. The overall performance rating for this outcome will be determined by summing the effectiveness scores for all Objectives as depicted in Tables 1.1 through 1.5, normalizing the scores using Table 1.6 and comparing the normalized sum to the rating scale in Table 1.7. Additional performance-based fee earned (if any) for this outcome is determined by comparing the overall outcome score (5.0 – 3.5) to the amount available within Table 1.8.

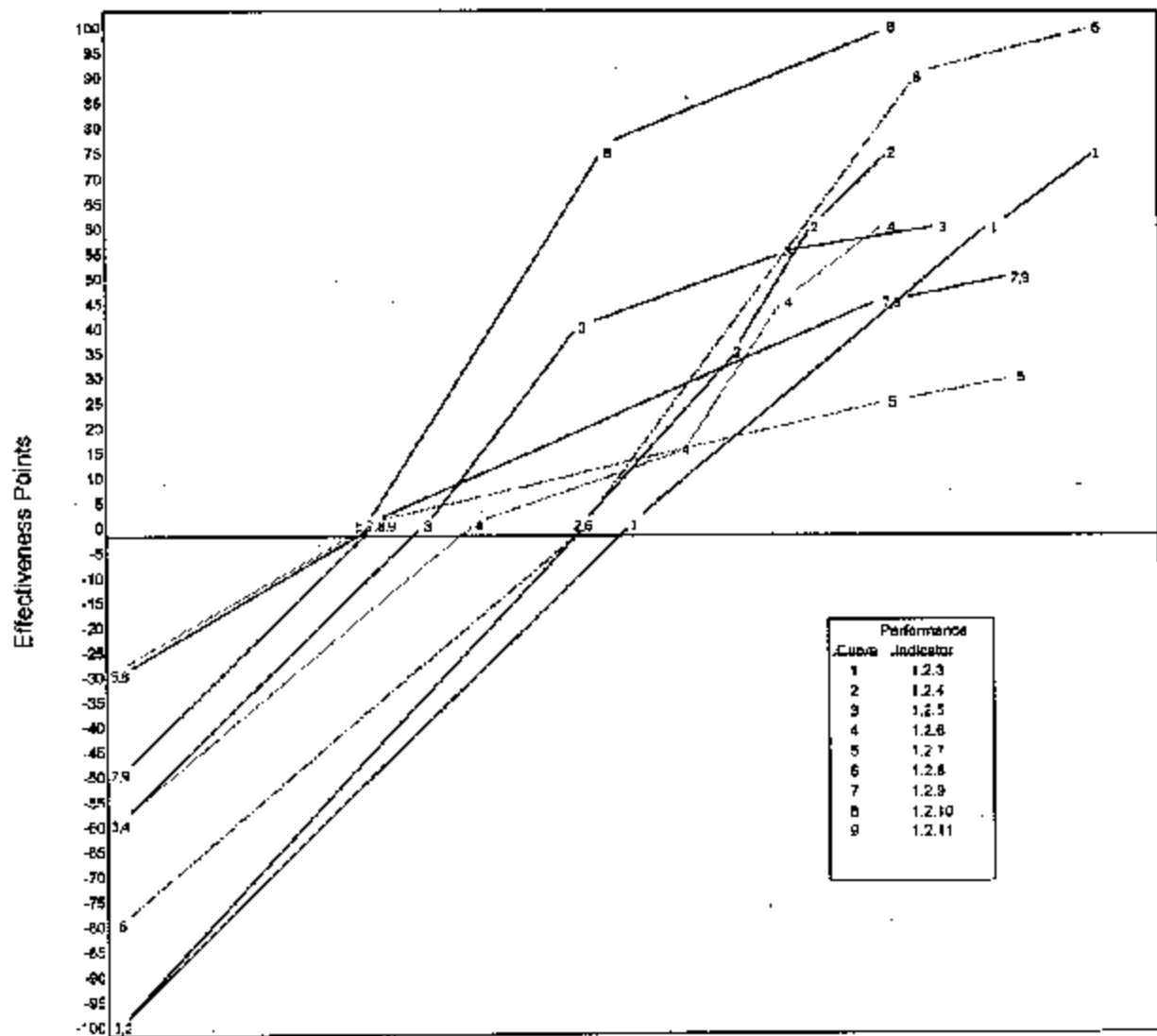
Figure 1A, Scientific & Technological Excellence Objective 1.1, Contingency Diagram



- Performance Indicator
- 1 External Peer Review
  - 2 Recog by Sci Committee
  - 3 R&D 100 / FLC Awards
  - 4 Publication Growth (%)
  - 5 Acad/Sci Partnerships

SCALES														
	M					G					E			D
	10%				5%				2%			5%		13%
	6.66				7.0				7.33			7.66		8.0
	15				10				5			0		5
	25	30	35	40	45	50	55	60	65	70	75	80		

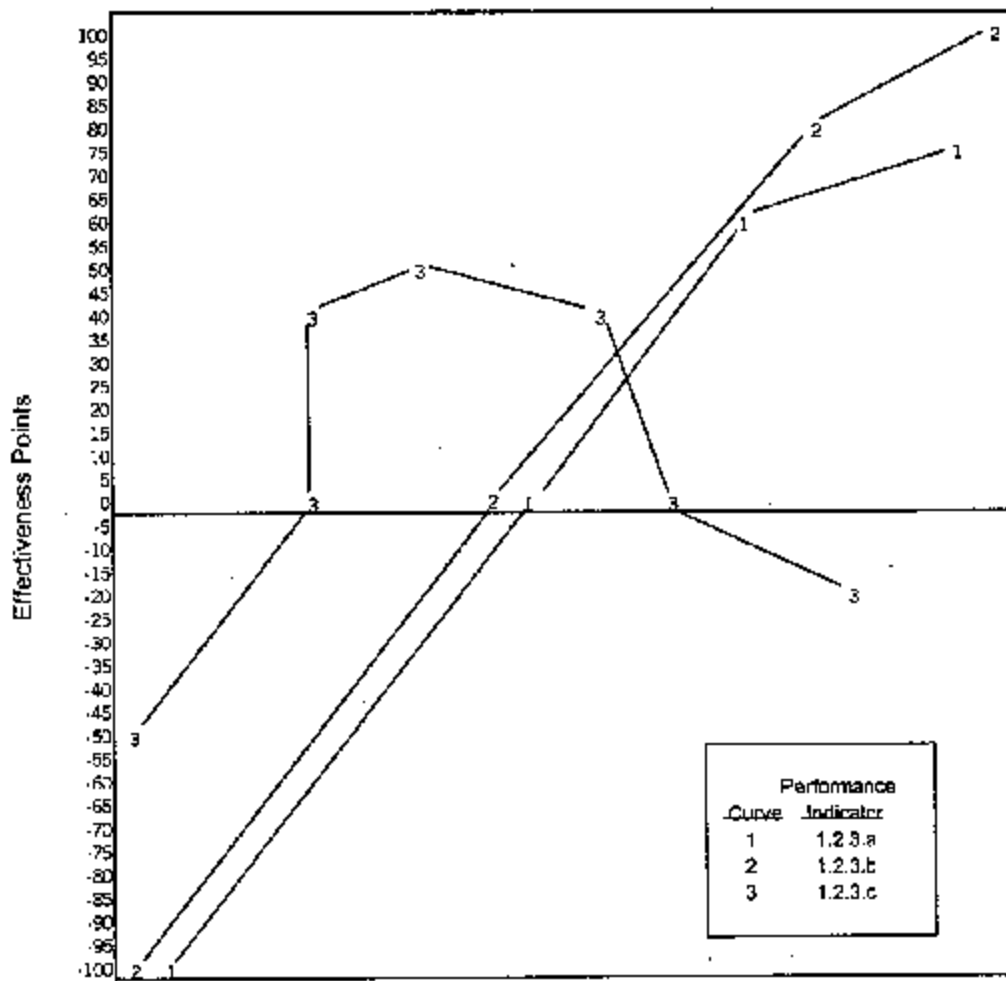
Figure 1B, Scientific & Technological Excellence Objective 1.2, Contingency Diagram



Performance Indicator	SCALES																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 EC - TFA Composite																				
2 ED - Priv Composite																				
3 ED - Tech Deploy																				
4 EQ - Mentord Solns																				
5 EQ - Cust Feedback																				
6 NS - Solns/Deploys																				
7 NS - Cust Feedback																				
8 Energy - Tech Deploy																				
9 Energy - Cust Fdbk																				



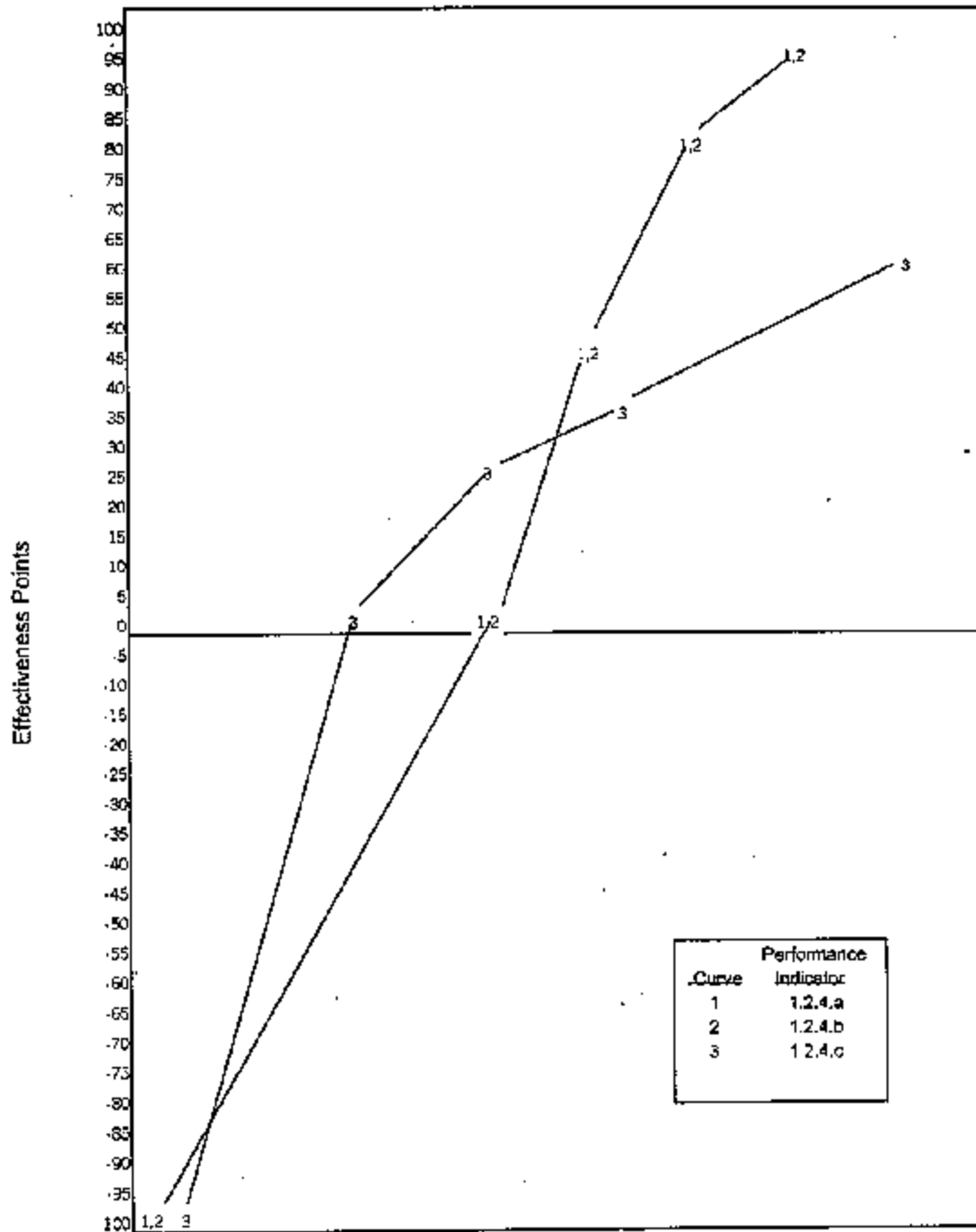
Figure 1C, Scientific & Technological Excellence Objective 1.2, Indicator 1.2.3,  
Contingency Diagram



Performance Indicator  
1 Survey Response  
2 Milestones  
3 Cost Variance

SCALES															
	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	100		
50			60			70			80		90				
5			0		3		8	10			15				

Figure 1D, Scientific & Technological Excellence Objective 1.2, Indicator 1.2.4,  
Contingency Diagram

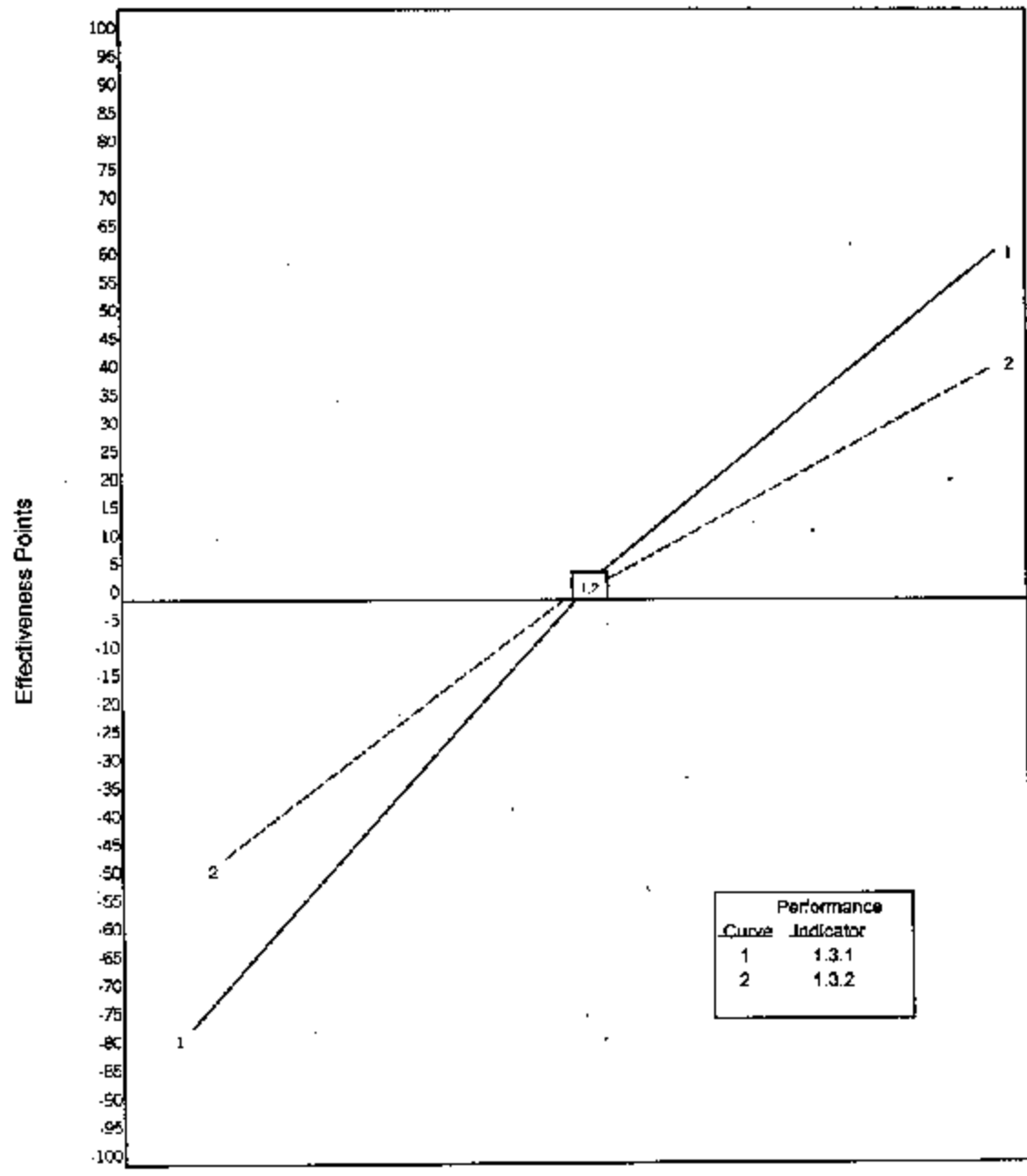


Performance Indicator

SCALES

1 BNFL Deliverables	0							50		65		81		95			
2 Strategic Decisions	0							50		65		81		95			
3 Issue Response		0			14			24			36					55	

Figure 1E. Scientific & Technological Excellence, Objective 1.3 Contingency Diagram



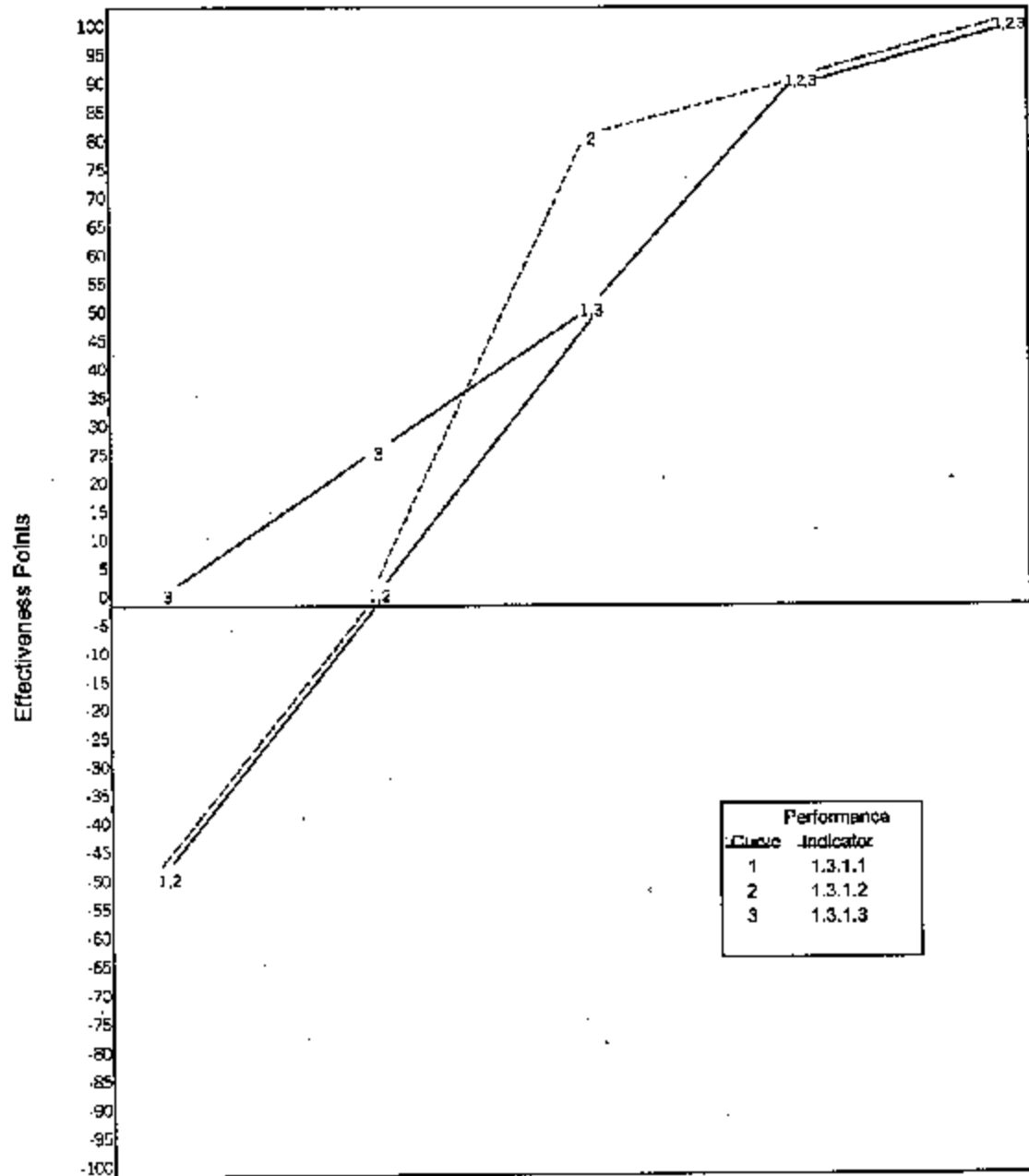
Performance Indicator

- 1 EM/ST Facilities Composite
- 2 ARM Facilities Composite

SCALES

	100		50		0		50		100		150		200		250		300
	-30	-20		0	20	40	60	80	100	120	140	160	180	200			

Figure 1F, Scientific & Technological Excellence, Objective 1.3, Indicator 1.3.1  
Contingency Diagram



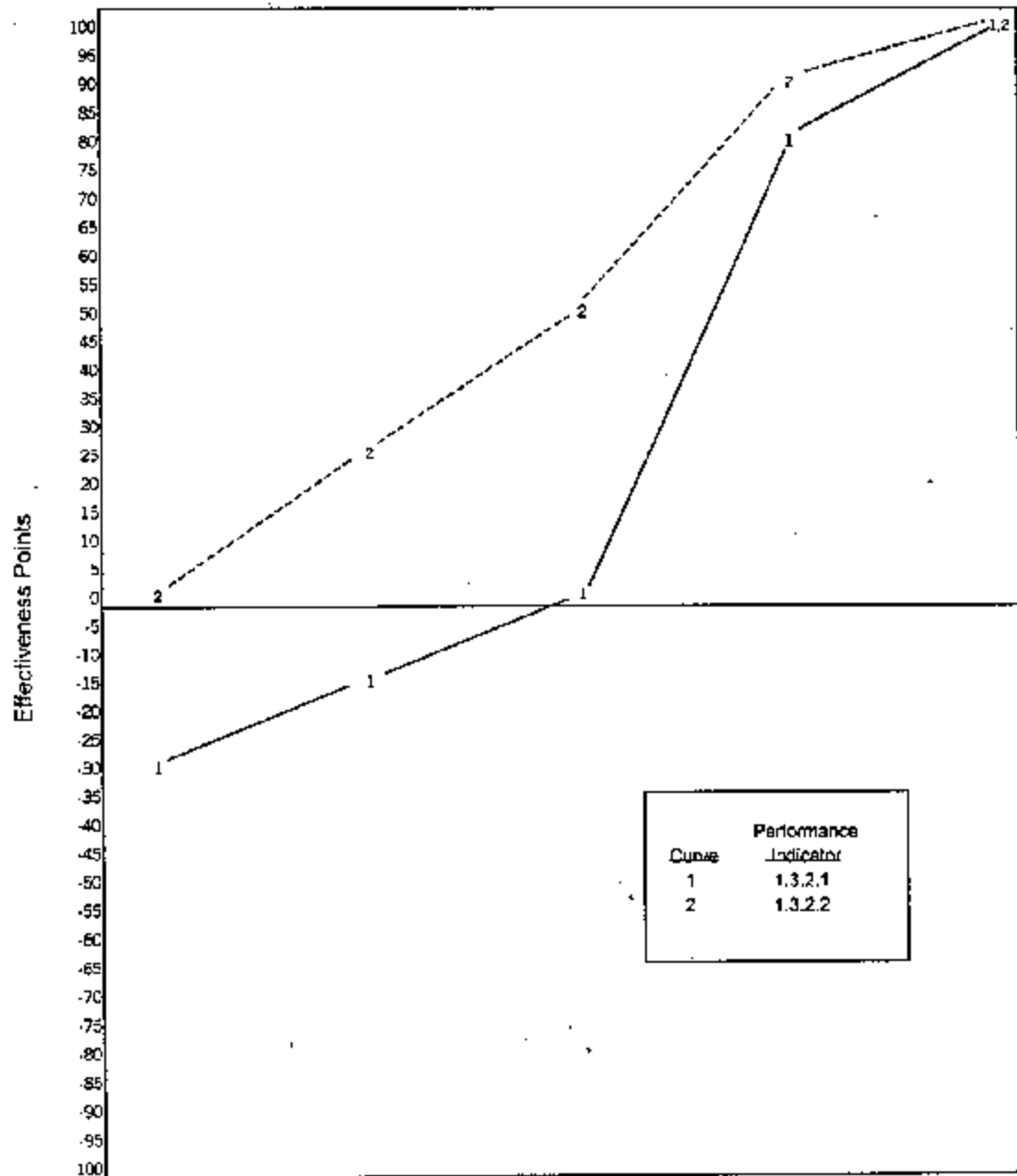
Performance Indicator

- 1 Wiley Lab Users (%)
- 2 Peer Rev'd Publications (%)
- 3 User Satisfaction

SCALES

4	5	10	15	20%
4	0	5	10	15
<30% Sat	30% - 50% Sat	>50% Sat or N	50% < 17% V	>50% & 17% V

Figure 1G, Scientific & Technological Excellence, Objective 1.3, Indicator 1.3.2  
Contingency Diagram



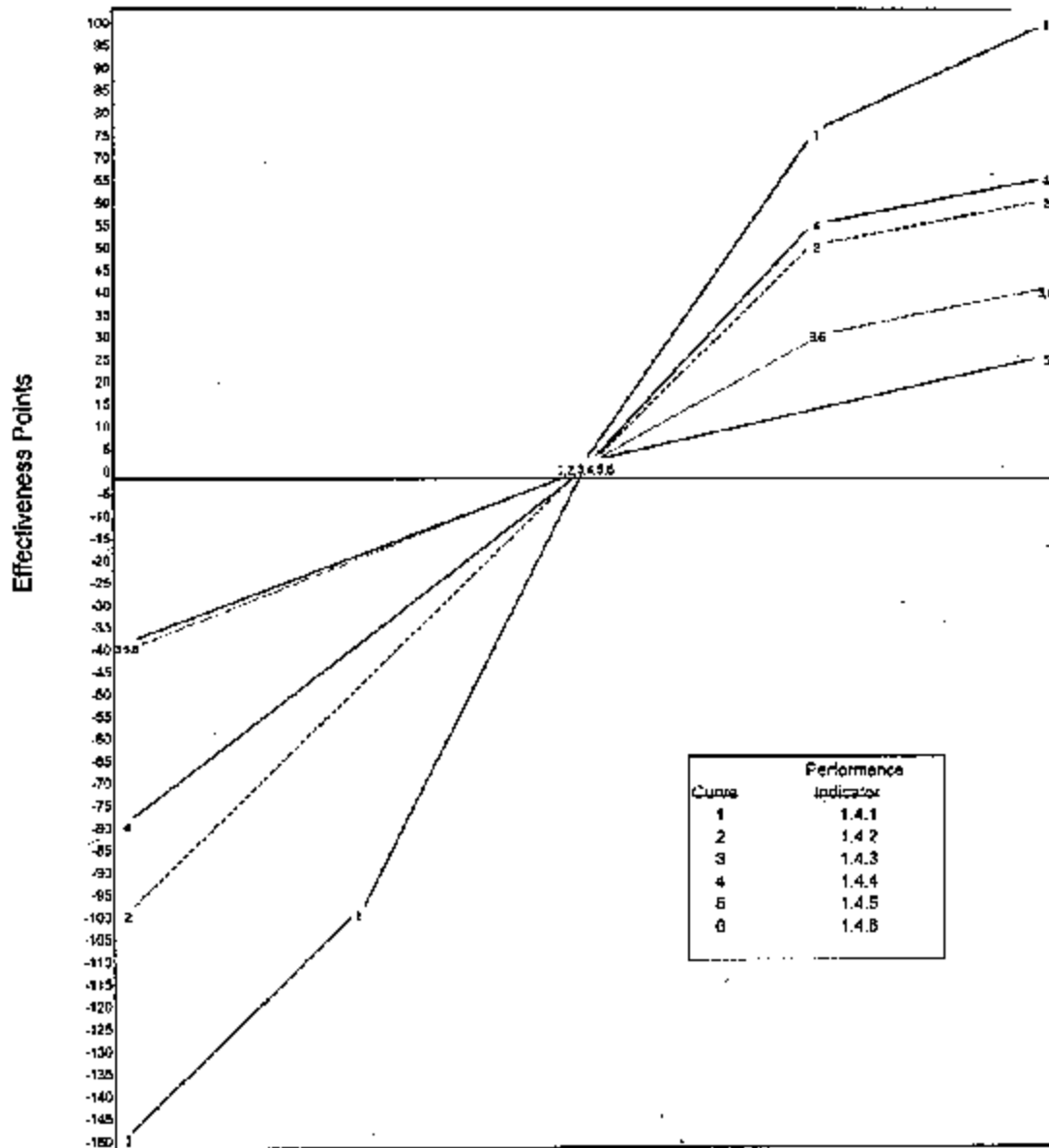
Performance Indicator

- 1 ARM Pubs. Growth
- 2 ARM User Satisfaction

SCALES

< 20%				20%				10%				0%				10%
<30% Sat				30% - 50% Sat				>50% Sat or N				50% & <17% VS				>50% & 17% VS

Figure 1H, Scientific & Technological Excellence, Objective 1.4 Contingency Diagram



Performance Indicator										SCALES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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ELEMENT	Performance Level	Effectiveness Score	Value Points	Weight	Weighted Points
1.1 Conduct high quality S&T programs					
1.1.1 Results of external peer review of relevance and excellence, including Divisional reviews					
1.1.2 Recognition by the external scientific and technical community					
1.1.3 Number of R&D 100 and FLC awards					
1.1.4 Publication Growth					
1.1.5 Number of quality academic/scientific partnerships					
	Total from Curves			50%	
1.1.6 Results of DOE-SC Evaluation of the quality of science				50%	
	Obj 1.1 Total				

Table 1.1 – Objective 1.1 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points	Weight	Weighted Points
1.2 Deliver S&T products relevant to DOE missions and national needs					
1.2.1 Results of DOE-SC evaluation of the relevance of Battelle work to DOE Missions and Needs				10%	
1.2.2 The results of DOE-SC evaluation of the Laboratory's programmatic performance				10%	
1.2.3 Effectively lead the technical aspects of the national Tanks Focus Area					
1.2.4 Effectively support the Hanford Tanks Privatization Effort					
1.2.5 Number of innovative technologies and approaches successfully deployed in commercial practice					
1.2.6 Provide significant solutions to Hanford problems/needs					
1.2.7 Customer Feedback on relevance and excellence in Environmental Quality Mission Areas					
1.2.8 Number of solutions and deployments to significant national security problems/issues					
1.2.9 Customer Feedback on relevance and excellence in National Security Mission Areas					
1.2.10 Number of energy technologies, systems and technical solutions deployed					
1.2.11 Customer Feedback on relevance and excellence in Energy Mission Areas					
	Total from Curves			80%	
	Obj 1.2 Total				

Table 1.2 - Objective 1.2 Performance Rating Development



ELEMENT	Performance Level	Effectiveness Score
<b>1.3.1 Successful Operation of Wiley Laboratory</b>		
1.3.1.1 Number of users of the Wiley Laboratory		
1.3.1.2 Number of peer-reviewed publications from use of the Wiley Lab by non-PNNL staff		
1.3.1.3 User satisfaction		
	Total to 1.3.1	
<b>1.3.2 Operation of Atmospheric Radiation Measurement Extended Research Facilities</b>		
1.3.2.1 Number of peer-reviewed publications based on ARM data		
1.3.2.2 User satisfaction		
	Total to 1.3.2	

Table 1.3 - Objective 1.3, Indicators 1.3.1 and 1.3.2 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points	Weight	Weighted Points
<b>1.3 Successfully operate the Wiley Lab &amp; ARM Facilities</b>					
1.3.1 Successful operation of the Wiley Laboratory					
1.3.2 Operation of ARM Extended Research Facilities					
	Total from Curves			50%	
1.3.3 Results of DOE-SC evaluation of the quality of the Laboratory's User Facilities				50%	
	Obj 1.3 Total				

Table 1.4 - Objective 1.3 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points	Weight	Weighted Points
<b>1. Scientific and Technological Excellence</b>					
<b>1.1 Conduct high quality S&amp;T programs</b>	<b>Obj 1.1 Total</b>			25%	
<b>1.2 Deliver S&amp;T products relevant to DOE missions and national needs</b>	<b>Obj 1.2 Total</b>			40%	
<b>1.3 Successfully operate the Wiley Lab &amp; ARM Facilities</b>	<b>Obj 1.3 Total</b>			10%	
<b>1.4 Demonstrate leadership &amp; excellence in program planning &amp; management ...</b>					
1.4.1 Demonstrate programmatic leadership within Fundamental Science					
1.4.2 Demonstrate programmatic leadership in Environmental Quality					
1.4.3 Effectively lead the technical aspects of the Groundwater and Vadose Zone efforts					
1.4.4 Customer Feedback on Leadership for key National Security Programs					
1.4.5 DOE customer feedback on technical and managerial leadership in the Energy thrust areas					
1.4.6 Number of formal agreements ... with private sector entities					
	<b>Obj 1.4 Total</b>			25%	
				<b>Total</b>	

Table 1.5 -- Scientific and Technological Excellence Critical Outcome Performance Rating Development.

Objective 1.1	Objective 1.2	Objective 1.3	Objective 1.4	Value Points
100.0	600.0	100.0	330.0	5.0
96.0	575.5	95.0	322.6	4.9
92.0	551.0	90.0	315.1	4.8
88.0	526.5	85.0	307.7	4.7
84.0	502.0	80.0	300.2	4.6
80.0	477.5	75.0	292.8	4.5
76.0	449.4	70.0	285.3	4.4
72.0	421.5	65.0	277.9	4.3
68.0	393.4	60.0	270.4	4.2
64.0	365.3	55.0	263.0	4.1
60.0	337.4	50.0	255.5	4.0
54.0	309.3	45.0	230.0	3.9
48.0	281.2	40.0	204.4	3.8
42.0	253.3	35.0	178.9	3.7
36.0	225.2	30.0	153.3	3.6
30.0	197.1	25.0	127.8	3.5
24.0	157.8	20.0	102.2	3.4
18.0	118.3	15.0	76.7	3.3
12.0	78.8	10.0	51.1	3.2
6.0	39.5	5.0	25.6	3.1
0.0	0.0	0.0	0.0	3.0
-9.3	-28.0	-6.5	-25	2.9
-18.5	-56.0	-13.0	-50	2.8
-27.8	-84.0	-19.5	-75	2.7
-37.0	-112.0	-26.0	-100	2.6
-46.3	-140.0	-32.5	-125	2.5
-55.5	-168.0	-39.0	-150	2.4
-64.8	-196.0	-45.5	-175	2.3
-74.0	-224.0	-52.0	-200	2.2
-83.3	-252.0	-58.5	-225	2.1
-92.5	-280.0	-65.0	-250	2.0
-95.8	-308.0	-71.5	-270	1.9
-99.0	-336.0	-78.0	-290	1.8
-102.3	-364.0	-84.5	-310	1.7
-105.5	-392.0	-91.0	-330	1.6
-108.8	-420.0	-97.5	-350	1.5
-112.0	-448.0	-104.0	-370	1.4
-115.3	-476.0	-110.5	-390	1.3
-118.5	-504.0	-117.0	-410	1.2
-121.8	-532.0	-123.5	-430	1.1
-125.0	-560.0	-130.0	-450	1.0

Table 1.6 - Scientific and Technological Excellence Critical Outcome Score Normalization Table

Total Score	5.0 - 4.5	4.4 - 3.5	3.4 - 2.5	2.4 - 1.5	1.4 - 1.0
Final Rating	Outstanding	Excellent	Good	Marginal	Unsatisfactory

**Table 1.7 - Scientific and Technological Excellence Critical Outcome Final Rating**

Outcome Rating	Score	Performance-Based Fee
Outstanding	5.0	\$770,000
	4.9	\$721,875
	4.8	\$673,750
	4.7	\$625,625
	4.6	\$577,500
	4.5	\$529,375
Excellent	4.4	\$481,250
	4.3	\$433,125
	4.2	\$385,000
	4.1	\$336,875
	4.0	\$288,750
	3.9	\$240,625
	3.8	\$192,500
	3.7	\$144,375
	3.6	\$96,250
	3.5	\$48,125
Good or Less	3.4	\$0

**Table 1.8 - Scientific and Technological Excellence Critical Outcome Additional Performance-Based Fee Matrix**

## 2.0 OPERATIONAL EXCELLENCE (20%)

### Critical Outcome

**Battelle will conduct work and operate Laboratory facilities with distinction, fully supportive of and integrated with the Laboratory's science and technology mission and fully protective of workers, the public and the environment.**

Modification: The objectives, indicators and expected levels of performance identified below have been developed based on the best information available at the time. Should circumstances arise which require modifications to any of the objectives, indicators and/or expected levels of performance within this outcome it shall be accomplished through the approved change control process described within this document. If the Parties cannot reach agreement on the changes the Contracting Officer shall have the right to make reasonable changes as specified within the contract DE-AC06-76RLRL01830.

- 2.1 Objective – Sustain and enhance operational excellence in safety and health, and environmental protection. (67%)

### Performance Indicators

- 2.1.1 Worker involvement, knowledge, and culture relative to ES&H (30%)

Description: This Performance Indicator is a composite of three Performance Subindicators, designed to provide an overall evaluation of worker involvement, knowledge, and culture relative to ES&H and the expectations of DOE and Battelle.

- 2.1.1.1 Management interactions with workers to ensure staff involvement in work planning, knowledge of requirements and attitude/culture relative to ES&H.

Measure: This indicator provides a measure of management and staff interaction to improve staff involvement in work planning, knowledge of requirements, and appropriate worker attitude/culture relative to ES&H. The performance will be determined by observing work and performing interviews.

Description: Each Contractor R&D division and the Contractor ES&H and Facilities and Operations (F&O) directorates will perform in-field assessments of staff behavior, knowledge, and opinion using a standardized evaluation tool reviewed and approved by DOE RL. The evaluation tool will measure specific staff members and will be a basis for Laboratory improvement in the following areas:

- Involvement in work planning
- Knowledge of applicable requirements
- Behaviors relevant to ES&H
- Opinion of the adequacy of their involvement and the value of ES&H controls in their work

The tool will be used by objective staff (e.g. management, management representatives, Safety and Health Representatives, or selected bargaining unit staff for some of F&O evaluations) during routine field activities (such as self-assessment walkthroughs). Staff who are selected to participate in the evaluations will be asked to verbally answer quantifiable questions and provide comments or other information.

Based on verbal responses by staff, observation of work being performed, and other information as necessary the manager/staff performing the evaluation will make a rating determination relative to the bullets above. The results generated by these evaluations will be included in the assessing organization's self-assessment results and used in accordance with their self-assessment program, which is measured within the Leadership and Management Critical Outcome.

Each Contractor R&D division and the Contractor ES&H and P&O directorates will identify those organizations that perform potentially hazardous work (organizational elements that perform only paper studies will be excluded). The target is to conduct one hundred and seventy-five assessments (interactions). These assessments will be conducted by the participating organizations and rolled-up at the Lab level. During self-assessment walkthroughs of lab-intensive areas or other routine field activities as appropriate, evaluators will identify staff who are working and who will be asked to participate in the evaluations under this PL

Data will be collected and reported on a quarterly basis. The following table represents the suggested number of assessments per quarter by organization. The number of assessments shall, without material deviation, be spread over participating organizations as represented below.

	Assessments by Organization						
FY-99	EHSD	Energy	ES&H	EID	F&O	NSD	Total
Q1	9	7	5	8	8	7	44
Q2	9	7	5	8	8	7	44
Q3	8	7	5	9	8	7	44
Q4	8	7	5	8	9	6	43
Total	34	28	20	33	33	27	175

Performance:

Target: 175 evaluations performed in FY99 and the results used in the self-assessment Program  
 Neutral: 150 evaluations performed in FY99 and the results used in the self-assessment Program  
 Minimum: 125 evaluations performed in FY99 and the results used in the self-assessment Program

2.1.1.2 Dose Index

Measurement: This indicator provides a direct measurement of the accuracy of estimating dose for activities during radiological work planning process.

Description: The ratio of the sum of actual doses received as recorded in ACES or REX, as appropriate, divided by the sum of all collective dose estimates required by RCP-3.1.01, Exhibit 1. Radiological Engineers must have a better understanding of work activities and job scope while work planners must have a better understanding of radiological ALARA practices to be successful on this indicator. This indicator will include only those activities requiring entry into Radiation Areas, and High Radiation Areas. This indicator will be tracked for those activities with an estimated dose for an individual greater than 100 mrem or an estimated dose greater than 1000 mrem collective for a group.

Assumptions: There will be no significant change in scope of radiological work within the Laboratory

**Performance:**

**Target:** Between and including 0.8-1.2 ( $\Delta \leq 0.2$ )  
**Neutral:** Between 0.4-0.8 or 1.2-1.6 ( $\Delta \leq 0.4$ )  
**Minimum:** Below 0.4 or above and including 1.6 ( $\Delta > .6$ )

**2.1.1.3 User involvement in SBMS Subject Area development**

**Measure:** This indicator provides a measure of worker involvement in development of Laboratory-level procedures (i.e., SBMS Subject Areas). This is one aspect of worker involvement within the Contractor organizations and also demonstrates management's commitment to the principle of worker involvement.

**Description:** The percentage of user involvement in the development of new SBMS Subject Areas either as part of a development team or by providing comments to early drafts during the development stage. The total number of new Subject Areas issued during FY99 will be the base (denominator) and the number with user involvement (as defined above) the numerator. The performance will be based on cumulative performance throughout the fiscal year and reported monthly. The indicator will include all new Subject Areas issued via SBMS during the fiscal year.

The sunseting of A-Manuals will serve as a gate for this portion of the Worker Involvement performance indicator. For this subindicator to be counted in the overall evaluation of performance for the 2.1 objective, 60% of the chapters/sections of the A-Manuals that exist at the beginning of the fiscal year must be eliminated from the on-line system by the end of fiscal year 1999.

**Assumptions:** The following are basic assumptions for this indicator:

- User involvement is not necessary in 100% of new or revised Subject Areas.
- User involvement is designated by the line organization (R&D division or functional directorate) based on their need to participate.
- User involvement is characterized as participation before review of the final draft of a Subject Area.
- Line organizations may designate individuals to represent them that are assigned from functional organizations (e.g., Quality or ES&H). These designees are counted as "users."
- Subject Matter Experts (SMEs) and/or management system owners will provide a list of users to the SBMS manager, as evidence of worker involvement in the development of a Subject Area.
- The minimum number of workers that must be involved in the development of a Subject Area to count for this subindicator is one.
- A worker is defined as anyone other than the management system owner and the SME for a particular Subject Area.
- Sunseting occurs once all the information that needs to be converted to Subject Areas, as concurred with by the Subject Area Development Lead, has been converted and issued as an SBMS Subject Area, as a Program Description, or as another document (e.g., B-Manual).

**Performance:**

**Target:** Users involved in 60% or more of new Subject Areas developed.  
**Neutral:** Users involved in 40% of new Subject Areas developed.  
**Minimum:** Users involved in 30% or less of Subject Areas developed.

## 2.1.2 ES&H training commensurate with assigned responsibilities (30%)

**Measure:** The PI on ES&H training commensurate with assigned responsibilities is an indirect indicator that staff competence and level of knowledge throughout the Laboratory is commensurate with assigned responsibilities. The PI will be measured utilizing two subindicators.

**Description:** The ES&H required training course list (see 2.1.2.2 below) is based on the following categories of ES&H training requirements:

- Worker Safety and Health
- Radiological Controls
- Environment and Waste Management
- Emergency Planning

**Assumption:** The list of targeted ES&H required courses for this performance indicator may need to be adjusted during the year for courses that become inactivated or are no longer required. Such changes to the list will be made via approved change control.

### 2.1.2.1 Completion of SDTP and required ES&H training

**Measure:** This subindicator measures the extent to which staff have identified and completed their ES&H training requirements. This subindicator is measured in two parts, Part 1 and Part 2. Part 1 and Part 2 are multiplied together to provide a composite score for performance measurement.

**Description:**

#### Part 1 - Staff Completion of SDTP

Part 1 measures the extent to which regular full time staff have identified their current ES&H training requirements based on their job assignments using the Staff Development and Training Planning Tool (SDTP). The measure of the percentage of staff who have updated their SDTP is:

$$\% \text{ complete} = \frac{\text{No. of staff with SDTP updated since October 1, 1998}}{\text{Total number of regular full-time PNNL staff}} (x100)$$

The subindicator includes regular full time staff located in all Laboratory facilities (e.g., Sequim, BWO, and Seattle). It also includes other Battelle staff who are currently employed, were employed by Battelle for at least 3 months during the fiscal year, and have access to the SDTP at their location. "SDTP updated" means that the staff member, their manager, and/or training coordinator have developed/reviewed and approved the SDTP, and it has been loaded into the PeopleSoft PNL Student Training Plan database.

#### Part 2 - Staff Completion of ES&H Training Requirements:

The second part measures the extent to which staff have completed ES&H required training requirements:

$$\% \text{ complete} = \frac{\text{No. of staff who have completed all required ES\&H training}}{\text{No. of staff with SDTP updated since October 1, 1998}} (x100)$$

For this subindicator, "Required ES&H training" is the list of target required ES&H courses (see 2.1.2.2 below).



### Composite Measure of Completed ES&H Required Training

The multiplication of the two parts described above results in the percentage of staff who have completed all the targeted ES&H training based on a current SDTP. As such, it indicates a confidence value for staff ES&H competence.

Composite = Part 1 x Part 2 = %

For the subindicator, the year-end values are based on the values as they exist in the PeopleSoft databases on the last working day of the fiscal year, as corrected for year-end errors due to recording delays for completed training. The subindicator is measured monthly in both parts and as a composite.

Performance:

Target: 85%  
Neutral: 80%  
Minimum: 70%

#### 2.1.2.2 Completion of ES&H Training Courses

Measure: This subindicator measures the extent to which the total number of designated ES&H courses are completed.

Description:

$$\% \text{ complete} = \frac{\text{Total No. of Required ES \& H Courses} - \text{No. of Courses Past Due > 3 months}}{\text{Total No. of Required ES \& H Courses}} (x100)$$

The "Total number of required ES&H Courses" is the number of instances of training for all the required ES&H courses listed below. The three-month allowance gives staff 30 days to complete the SDTP and another two months to schedule and take identified ES&H training courses.

Performance:

Target: 90%  
Neutral: 85%  
Minimum: 70%

#### ES&H Course Listing for FY99

Course Code	Course Title
842	16-Hour Hazardous Waste Operations Upgrade Training
837	24-Hour Hazardous Waste Operations Training
835	40-Hour Hazardous Waste Operations Training
404	BED Training - 325 Building
403	BED Training - Laboratory-Type Facilities
402	BED Training - Office-Type Facilities
407	BEP - 325 Building
1061	Building 325 Safety Analysis
694	Confined Space Entry
379	Crane/Hoist/Rigging - Initial
967	Crane/Hoist/Rigging - Requalification
646	Criticality Safety - 324 FMHs - Classroom

Course Code	Course Title
647	Criticality Safety - 324 FMHs - Testing
648	Criticality Safety - 325 FMHs - Classroom
649	Criticality Safety - 325 FMHs - Testing
640	Criticality Safety for Cognizant Line Managers - 325 Building
639	Criticality Safety for Criticality Safety Representatives Testing
638	Criticality Safety for Criticality Safety Representatives Training
641	Criticality Safety for Isolated Facility Representatives - 325 Building
1003	Criticality Safety Program in 325
577	DOE-Owned Sealed Radioactive Source Custodian Training
1059	Electrical Safety for Non-Workers
1014	Electrical Safety for Workers
695	Emergency Safety Showers and Eyewash Stations
696	Emergency Safety Showers and Eyewash Stations On-the-Job Training
701	Fall Protection - General
653	Fire Extinguisher Awareness
706	Firearms Custodian/Alternate
699	Firearms Safety Training - Annual
1056	Floor Over Crane & Hoists On-the-Job Training
1057	Forklift On-the-Job Training Evaluation
381	Forklift Operation - Initial
968	Forklift Requalification
411	General Emergency Preparedness
817	General Employee Radiation Training (GERT)
818	General Employee Radiation Training (GERT) - Refresher
813	Glovebox Operations (Radiological)
814	Glovebox Operations (Radiological) On-the-Job Training
664	Hazard Communication: Asbestos
673	Hazard Communication: Bloodborne Pathogens Refresher
662	Hazard Communication: Solvents
671	Hazardous Communication and the Laboratory Standard
674	Hazardous Material Shipping Representative Training
833	Hazardous Waste Management
676	HazMat Shipping Awareness Training
675	HazMat Training for Warehouse and Transportation Personnel
839	HazWOper 8-Hour Refresher
681	Hearing Conservation (Noise Control)
679	Hot Work Firewatch Training
988	Hot Work Permit Training
959	Independent Verification Techniques and Requirements
685	Laboratory Hood Safety
686	Laboratory Hood Safety On-the-Job Training
683	Laser Safety
578	Licensed Radioactive Material Custodian Training
700	Lock and Tag - General Employee Orientation
692	Lock and Tag for Authorized Staff Members
844	Low-Level Waste Generator Training
845	Low-Level Waste Generator Training for Bargaining Unit
652	PNNL NEPA Training Course
715	Radiation Generating Device Operator/Custodian
687	Radiological Work in Fume Hoods Initial Training
688	Radiological Work in Fume Hoods On-the-Job Training

Course Code	Course Title
819	Radiological Worker I
820	Radiological Worker I – Refresher
821	Radiological Worker II
822	Radiological Worker II – Refresher
716	Respiratory Protection Training – Issuers and Wearers (Air Purifying respirators)
720	Respiratory Protection Training – Single-Use Dust/Mist Respirators
823	Temporary Radiological Containments
834	Transuranic (TRU) Waste Packager

### 2.1.3 Material Control (30%)

**Description:** This performance indicator is a composite of two performance sub-indicators that provide an evaluation of Battelle's ability to manage hazardous materials in a manner that fully protects the worker and the environment and insures compliance with all applicable Federal, State and local regulations.

#### 2.1.3.1 Chemical Management System

**Measure:** This sub-indicator provides a measure of the overall accuracy and completeness of the chemical inventory data contained in the Laboratory's Chemical Management System. The overall accuracy and completeness of the data in CMS will be assessed based on a sample (as defined in the FY98 Self-Assessment Plan for CMS) of the chemical holdings for ETD, EHSD, ED, NSD, and F&O.

**Description:** A score of overall accuracy and completeness of the chemical inventory data as determined by the FY98 Self-Assessment Plan for CMS. Each division (ETD, ED, EHSD, and NSD) and the F&O directorate will complete at least one self-assessment on the accuracy and completeness of the data in the CMS by the end of FY 1999. If multiple assessments are performed, the FY99 performance will be the result of the last assessment.

**Assumption:**

- The FY98 Self-Assessment Plan criteria for determining accuracy and completeness of the chemical inventory data should be reviewed and revised as needed to more appropriately assess the data. The revised plan should be submitted to RL by November 1998 for review and approval.
- Approval will be given within 30 days of submittal

**Performance:**

Target:	Score of 95 in CMS accuracy
Neutral:	Score of 85 in CMS accuracy
Minimum:	Score of 75 in CMS accuracy

#### 2.1.3.2 Generator management of SAA (Slop Jars)

**Measure:** This performance indicator (PI) measures the percentage of hazardous waste "slop jars", a specific type of satellite accumulation area (SAA) waste, that pass verification. This PI is a direct measure of generator accountability, as the generator is compiling the data used to perform waste designation and weight percent calculations of the "slop jars"

**Description:** Upon receipt, Waste Operations will verify the content of all "slop jars" as compared to the Chemical Disposal/Recycle Record (CDRR). As a minimum, a pH test and visual inspection will be performed. Other tests, as deemed necessary by Waste Operations may also be performed, but are not required. The failure of any test or inspection will not allow the "slop jar" to pass verification. Additionally notice of failed verification from any other on-site or off-site facility, that is directly traceable to a unique "slop jar", will count as a failed verification. On a quarterly basis, the percentage of "slop jars" that pass verification will be reported. This data will be the total number of "slop jars" that passed verification divided by the total number of "slop jars" received by Waste Operations times 100 during the fiscal year quarter. Battelle's performance will be the percentage that passes verification during the 4<sup>th</sup> quarter of FY99. For purposes of this subindicator, only notices from other on-site or off-site facility received prior to 9/30/99 will be included.

**Assumption:** "Slop jar" is defined as: Up to 5 gallon containers holding compatible laboratory wastes which are typically stored in satellite accumulation areas or up to 55 gallon containers holding compatible operations/maintenance wastes which are typically stored in 90 day accumulation areas.

**Performance:**

Target	98%
Neutral	95%
Minimum	90%

#### 2.1.4 ES&H Lagging Performance Indicators (10%)

**Description:** This Performance Indicator is a composite of nine Performance Sub-indicators, designed to provide an overall evaluation of the Laboratory's Environment, Safety and Health Program relative to the expectations of DOE and Battelle. These sub-indicators and their specific levels (metrics) are developed jointly by DOE and the Contractor.

##### 2.1.4.1 OSHA Lost Workday Case Incidence Rate (Lost Workday Case Rate)

**Measure :** This sub-indicator provides a measure of the Laboratory's processes for identifying, and eliminating or controlling hazards which can result in occupational illnesses and injuries that are serious enough to result in "Lost Workdays" as defined by the requirements of 29 CFR 1904.

**Description:** (Number of Lost Workday Cases x 200,000) / hours worked. This measure approximates the number of Lost Workday Cases per 100 employees per year.

**Assumptions:**

- Hours worked includes labor hours for Contractor staff members, temporary personnel for which labor hours are recorded, and AWU-NW appointees. The accidents for all of these groups are recorded in the OSHA Log, and reported to the DOE under the Laboratory Research Contractor Number.
- Contractor incidence rates are reported on a Fiscal Year basis to support the designated performance appraisal period. DOE baseline data is reported on Calendar Year basis to conform to OSHA recordkeeping and reporting requirements. Calendar Year 1996 is the most recent complete year for which DOE accident data is available.
- The OSHA definition of a Lost Workday Case is any occupational injury or illness case involving days away from work and/or days of restricted work activity.

**Performance:**

Target:	1.2
Neutral:	1.4
Minimum:	1.7

**2.1.4.2 OSHA Recordable Case Incidence Rate (Recordable Case Rate)**

**Measure:** This sub-indicator provides a measure of the Laboratory's processes for identifying, and eliminating or controlling hazards which can result in occupational illnesses and injuries that are serious enough to meet the OSHA criteria for entry into the Log and Summary of Occupational Injuries and Illness (OSHA form 200, or OSHA Log).

**Description:**  $(\text{Number of OSHA Recordable Cases} \times 200,000) / \text{Hours Worked}$ . This measure approximates the number of OSHA Recordable Cases per 100 employees per year.

**Assumptions:**

- Hours worked includes labor hours for Laboratory staff members, temporary personnel for which labor hours are recorded, and AWU-NW appointees. The accidents for all of these groups are recorded in the OSHA Log, and reported to the DOE under the Laboratory Research Contractor Number.
- Laboratory incidence rates are reported on a Fiscal Year basis to support the designated performance appraisal period. DOE baseline data is reported on Calendar Year basis to conform to OSHA recordkeeping and reporting requirements. Calendar Year 1996 is the most recent complete year for which DOE accident data is available.

**Performance:**

Target:	2.3
Neutral:	2.5
Minimum:	2.8

#### 2.1.4.3 OSHA Lost Workday Incidence Rate (Lost Workday Rate)

**Measure :** This sub-indicator provides a measure of the Laboratory's processes for identifying, and eliminating or controlling hazards which can result in occupational illnesses and injuries that are serious enough to result in "Lost Workdays" as defined by the requirements of 29 CFR 1904 and effectively manage the lost workdays for those cases that do occur.

**Description:**  $[(\text{Number of Days Away from Work} + \text{Number of Restricted Workdays}) \times (200,000)] / \text{Hours Worked}$ . This measure approximates the number of Lost Workdays per 100 employees per year.

**Assumptions:**

- Hours worked includes labor hours for Laboratory staff members, temporary personnel for which labor hours are recorded, and AWU-NW appointees. The accidents for all of these groups are recorded in the OSHA Log, and reported to the DOE under the Laboratory Research Contractor Number.
- Contractor incidence rates are reported on a Fiscal Year basis to support the designated performance appraisal period. DOE baseline data is reported on Calendar Year basis to conform to OSHA recordkeeping and reporting requirements. Calendar Year 1996 is the most recent complete year for which DOE accident data is available.
- The OSHA definition of lost workdays is the sum of the Days Away from Work and Restricted Workdays recorded for the cases entered into the OSHA log.
- It is not possible to determine actual performance at the end of any given fiscal year, as data continues to be collected until all cases are closed (i.e., cases that close after FY end will cause an increase in the total). However, as of September 7, 1998, FY98 performance is 13.87 and FY97 performance is 28.82. Since this is only measured until the end of FY99 the following performance values are more challenging than taking a three-year average as the baseline.

**Performance:**

Target:	20
Neutral:	30
Minimum:	40

#### 2.1.4.4 Unplanned Doses:

**Measurement:** This subindicator provides a measure of the Laboratory's processes for controlling dose.

**Description:** Number of unplanned doses as defined.

- Any single occupational dose that exceeds an expected dose by 100 mrem.
- a single unplanned dose onsite to a minor, student, or member of the public that exceeds 50 mrem
- unplanned doses above ACLs as defined in the Hanford Site Radiological Control Manual.

Assumptions:

- There will be no significant change in scope of radiological work within the Laboratory

Performance:

Target: 0  
Neutral: 2  
Minimum: 4

#### 2.1.4.5 Spread of Radioactive Contamination

Measurement: This subindicator provides a measure of the Laboratory's processes for controlling the spread of radioactive contamination.

Description: Number of instances of uncontrolled unwanted (i.e., non-legacy) spread of radioactive contamination meeting the following criteria:

- Any unplanned spill of liquids in excess of one gallon contaminated with radioactive material in concentrations greater than five times the Derived Concentration Guide values listed in DOE 5400.5, Figure III-1
- Identification of radioactive contamination outside a radiological area (as defined in 10 CFR 835, Occupational Radiation Protection) or radiological buffer area established for contamination control, but within a Controlled Area, in excess of 10 times the total contamination levels in 10 CFR 835, Appendix D. For tritium, until a total contamination value is specified by 10 CFR 835 Appendix D, report contaminations in excess of 10 times 10,000 dpm/100cm<sup>2</sup>.
- Identification of radioactive contamination onsite that is not located within a Controlled Area, Fixed Contamination Area, or Soil Contamination Area, and is in excess of two times the total contamination levels in 10 CFR 835, Occupational Radiation Protection, Appendix D. For tritium, until a total contamination value is specified by 10 CFR 835 Appendix D, report contaminations in excess of 2 times 10,000 dpm/100cm<sup>2</sup>.
- Identification of radioactive contamination offsite in excess of any of the surface contamination levels specified in DOE 5400.5, Figure IV-1, that has not been previously identified and formally documented. For the first group listed in Figure IV-1 (i.e., transuramics...) use the values specified in Table 1 (provided as Appendix B to this Manual) of the EH-412 memorandum "Application of DOE 5400.5 Requirements for Release and Control of Property Containing Residual Radioactive Material", dated November 17, 1995.

Assumptions:

- There will be no significant change in scope of radiological work within the Laboratory

Performance:

Target: 2  
Neutral: 5  
Minimum: 7

#### 2.1.4.6 Loss of Radioactive Sources

**Measurement:** This subindicator provides a measure of the Laboratory's processes for controlling radioactive sources.

**Description:** Number of losses of accountability of a sealed or unsealed radioactive source that meet the following criteria:

- Loss of accountability of a sealed source or identification of lost radioactive material that exceeds ten times and is less than 100 times the quantities specified in DOE N 441.1, RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES.
- Loss of accountability of a sealed source or identification of lost radioactive material that is one to ten times the quantities specified in DOE N 441.1, RADIOLOGICAL PROTECTION FOR DOE ACTIVITIES.
- The loss of a source that is exempted from inventory and source integrity tests as listed in Exhibit 1, RCP-4.3.03 of PNL-MA-26 will not count against this indicator.

**Assumptions:**

- There will be no significant change in scope of radiological work within the Laboratory

**Performance:**

Target:	0
Neutral:	2
Minimum:	3

#### 2.1.4.7 Skin and Personal Clothing Contamination Events

**Measurement:** This subindicator provides a measure of the Laboratory's processes for controlling personnel contaminations.

**Description:** Number of personnel or clothing radiological contaminations meeting the following criteria:

- Any measurement of personnel or clothing contamination (excluding protective clothing) at a level equal to or exceeding five times the total contamination limits identified in 10 CFR 835, Occupational Radiation Protection, Appendix D, measured (prior to washing or decontamination) in accordance with the DOE Radiological Control Manual Article 338, or equivalent. The contamination level shall be based on direct measurement and not averaged over any area. For tritium, until a total contamination value is specified by 10 CFR 835 Appendix D, report contaminations at a level equal to or exceeding 5 times 10,000 dpm/100cm<sup>2</sup>.
- Any measurement of personnel or clothing contamination (excluding protective clothing) at a level exceeding but less than five times the total contamination limits identified in 10 CFR 835, Occupational Radiation Protection, Appendix D, measured (prior to washing or decontamination) in accordance with the DOE Radiological Control Manual Article 338, or equivalent. The contamination level shall be based on direct measurement and not averaged over any area. For tritium, until a total



contamination value is specified by 10 CFR 835 Appendix D, report contaminations greater than 10,000 dpm but less than 5 times 10,000 dpm/100cm<sup>2</sup>.

Assumptions:

- There will be no significant change in scope of radiological work within the Laboratory

Performance:

Target: 5  
Neutral: 10  
Minimum: 15

#### 2.1.4.8 Environmental Protection

Measurement: This subindicator provides a measure of the Laboratory's processes for protecting the environment by controlling and managing:

- release of radionuclides
- release of hazardous substances/regulated pollutants/oil
- hazardous material contamination
- impact to ecological resources
- compliance with Environmental Agreements

##### Radionuclide Release

Measurement: This sub-indicator provides a measure of the Laboratory's processes for controlling the release of radionuclides.

Description: This indicator will track the following:

- Number of radionuclide releases meeting the following criteria:
  - Any monitored facility or site boundary where ambient exposure or concentration exceed what permitted emissions would predict as a result of normal operations.
  - Any controlled, uncontrolled, or accidental release that will be reported formally in writing to State/local agencies in a format other than routine periodic reports.
- Number of hazardous substances/regulated pollutants/oil releases meeting the following criteria:
  - Any spill of greater than 42 gallons of oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil outside of a permitted containment area. For operations involving oil field crude oil or condensate, any discharge less than the Unusual Occurrence level but in excess of 10 barrels.
- Number of hazardous material contaminations meeting the following criteria:
  - Discovery of onsite contamination due to Laboratory operations that exceeds 50% of a reportable quantity for such material per 40 CFR 302.

- Discovery of offsite contamination due to Laboratory operations that does not represent an immediate threat to the public but exceeds a reportable quantity for such material per 40 CFR 302.
- Number of occurrences causing significant impact to any ecological resource for which the DOE is a trustee (i.e., destruction of a critical habitat, damage to a historic/archeological site, damage to wetlands, etc.).
- Number of issues related to compliance of environmental agreements meeting the following criteria:
  - Any agreement, compliance, remediation or permit-mandated activity for which formal notification of enforcement has been received from the relevant outside regulatory agency that a site/facility is considered to be in noncompliance with a schedule or requirement. These include the following: Notice of Violation, Notice of Deficiency, Notice of Noncompliance, and Notice of Correction.

**Assumptions:**

- There will be no significant change in the scope of Research and Development work, which changes the assumptions used to develop the performance ranges.
- Environmental Management Services must concur with the classification of all occurrences measured in this performance indicator.
- Events that are deemed to count against the Environmental Protection Performance Indicator (2.1.4.8) will not count against the Transportation Performance Indicator (2.1.4.9). Likewise, events that are deemed to count against the Transportation Performance Indicator (2.1.4.9) will not count against the Environmental Protection Performance Indicator (2.1.4.8).

**Performance:**

Target:	1
Neutral:	3
Minimum:	4

**2.1.4.9 Transportation of DOE Hazardous Materials**

**Measurement:** This subindicator provides a measure of the Laboratory's processes for controlling the transportation of DOE Hazardous Materials.

**Description:** Number of issues meeting the following criteria:

- Any packaging or transportation activity involving:
  - the offsite release of a reportable quantity of non-radioactive hazardous material (including hazardous waste); or
  - the onsite release of a reportable quantity of radioactive materials, or hazardous materials (including hazardous waste).

- Noncompliance's of the DOT Hazardous Materials Regulations or the transportation and packaging requirements of the Nuclear Regulatory Commission involving:
  - an unqualified person signing shipping papers;
  - the highway routing selection requirements for highway route controlled shipments or the notification requirements for spent-fuel shipments not being observed; or
  - the applicable packaging requirements for the assembly, handling, or selection of a package not being in accordance with the applicable regulations.
- Any violation of the Hazardous Material Regulations or Federal Motor Carrier Safety Regulations if that violation is determined by DOT inspection and does not result in a penalty.

**Assumptions:**

- There will be no significant change in the scope of Research and Development work, which changes the assumptions used to develop the performance ranges.
- Environmental Management Services must concur with the classification of all occurrences measured in this performance indicator.
- Events that are deemed to count against the Environmental Protection Performance Indicator (2.1.4.8) will not count against the Transportation Performance Indicator (2.1.4.9). Likewise, events that are deemed to count against the Transportation Performance Indicator (2.1.4.9) will not count against the Environmental Performance Indicator (2.1.4.8).

**Performance:**

Target:	2
Neutral:	4
Minimum:	6

- 2.2 Objective: Increase mission capabilities through enhancement and effective use of Laboratory facilities and assets (33%)

**Performance Indicators**

- 2.2.1 **Facilities (Buildings):** Utilization of space is commensurate with science and technology mission needs (60%)

Description: This Performance Indicator is a composite of three Performance Sub-indicators, designed to provide an overall evaluation of the Laboratory's processes for space utilization relative to the needs of its science and technology mission and expectations of DOE and Battelle.

Secondary considerations are DOE needs for space utilization information on a site-wide or complex-wide basis.

2.2.1.1 Total office space assigned per number of staff members in an organization

Description:

- The total staff count (denominator) is defined as individuals working on site (Richland) in DOE and Battelle owned and leased office space that are included in the HR PeopleSoft database. Battelle bargaining unit employees have been removed from this staff count, as the majority of them do not require an office and are not assigned specific office space.
- The total usable office square foot (numerator) is defined as DOE and Battelle owned and leased office space that is part of the Space Chargeback System.

Since this sub-indicator is focused on office space, the following is excluded from the numerator and the denominator:

- Laboratory & shop space, warehouse space, bathrooms, halls, copier rooms, lunchrooms, auditorium, LAN and telephone closets, conference rooms, lobby areas, and vestibules are all considered common space and will not be contained in this sub-indicator.
- Staff and office space in buildings that are isolated and/or not within the Laboratory's direct regional control have been removed (e.g., WDC, 622, Tacoma, Portland, and Seattle).
- Office space that is tied to construction, unavailable for use, or contained in buildings slated for standby.

Measure: A broadly variant office occupancy ratio throughout the Laboratory can portray a misconception of office space utilization. Optimization of the office space use is also dependent on understanding the average office square foot per person. This indicator seeks to:

- Establish office square foot per person guidelines
- Ensure that Laboratory staff are housed in the most economical and efficient manner possible given their mission needs and the configuration of the space they occupy.
- Understand if there are actions that could be taken to influence the Laboratory's office space assignments in FY 1999.

This measure will be reported quarterly on an overall Laboratory basis.

Baseline & Assumptions: None

Performance: The total usable office square foot (numerator) divided by the total staff count (denominator)

The FY 1999 expected level of performance is 135 square ft/person. Current building designs, however, physically configure office space across PNNL to an average size of 144 ft<sup>2</sup>/office, which contributes to the difficulty in improving on the average office ft<sup>2</sup>/person. This measurement will be used in conjunction with satisfaction survey and benchmarking information to optimal occupancy ratios for PNNL. The FY 1999 target is 123 ft<sup>2</sup>/person.

Target:	123 ft <sup>2</sup> /person
Neutral:	135 ft <sup>2</sup> /person
Minimum:	147 ft <sup>2</sup> /person

#### 2.2.1.2 Staff Churn Rate

**Description:** Churn is a measure of the frequency of internal movement of employees, and is a major benchmark for space managers. A high degree of staff churn diverts financial resources away from the development and delivery of R&D product.

The total staff count (denominator) is defined as individuals working on site (Richland) in DOE and Battelle owned and leased office spaces that are included in the HR PeopleSoft database. Staff moves information (numerator) will be extracted from the Laboratory's Move Tracking System (MTS).

To focus the measurement of churn, the following is excluded from both the numerator and the denominator:

- Moves associated with non-Battelle staff (eg. AWU students, sub-contractors)
- Moves within buildings that are isolated and/or not within Battelle's immediate regional control (WDC, 622, Tacoma, Portland, and Seattle)
- New hires or staff terminations with Battelle.

**Measure:** In this first year this indicator will help:

- Understand if there are actions that could be taken to influence the amount of discretionary churn that occurs
- Establish baseline data by which future decisions can be made.

This measure will be reported quarterly on an overall Laboratory basis

**Baseline & Assumptions:** None

**Performance:** The total number of staff moves (numerator) divided by total number of staff (denominator).

Target:	50%
Neutral:	55%
Minimum:	65%

#### 2.2.1.3 Continuous improvement in F&O services and operations realized from benchmarking

**Description:** The Facility and Operations Directorate has committed to benchmarking as a fundamental strategy to identify high impact areas for emphasis on continuous improvement. The Directorate has established the vision of being the benchmark for the services it delivers by improving on the quality, satisfaction, and cost effectiveness of those services with most significance and impact to the Laboratory.

**Basis and Assumptions:** FY 1999 will be the third year that the Contractor has participated in benchmarking activities and intends to continue involvement in the exercise conducted by Facility Issues. As additional pertinent national benchmarking opportunities are identified, participation will be expanded to aid in meeting the stated objective. The measures identified have been developed from a two-year performance base (FY97 & FY98) resulting from the Facility Issues benchmarking exercise, and establish as satisfactory the level of performance obtained in FY 1998.

**Performance:**

Target: 8 points  
Neutral: 4 points  
Minimum: 0 points

**Measures:**

**Part 1:** Improvement in cost per unit measure position in the FY 1999 Facility Issues National Benchmarking comparative survey for total cost.

**Performance Scoring:**

4 Points will be awarded for a 5% improvement in cost per unit measure from FY98 to FY99 and ranking in second quartile

2 Points will be awarded for a 5% improvement in cost per unit measure from FY98 to FY99

0 Points will be awarded for a 0% to 5% improvement in cost per unit measure from FY98 to FY99

**Part 2:** Facility Issues Customer Satisfaction survey results show overall improvements from previous year.

**Performance Scoring:**

4 Points will be awarded for a 4% overall improvement from FY98 to FY99 and improvement in 50% or more of areas measured

2 Points will be awarded for a 4% overall improvement from FY98 to FY99 and improvement in 25% to 50% of areas measured

0 Points will be awarded for a 0% to 4% overall improvement from FY98 to FY99

**2.2.2 R&D Equipment Utilization (10%)**

**Description:** This performance indicator reflects the desire for effective utilization of existing R&D equipment/systems and as such measures both the availability for use (*i. e.* was the equipment available when needed) and utilization of the R&D equipment/systems (*i. e.* was the equipment actually used). The focus will be on R&D capital equipment/systems representing a range in value from \$50K to >\$5M, with a representative suite of R&D equipment/systems selected from each of the four R&D Divisions (Energy, EHSU, ETD, NSD).

**Measure:** The availability and the use of R&D equipment/systems in support of the R&D mission of the Laboratory will be measured in FY99 to establish a basis for decisions that would effectively increase equipment effectiveness across programmatic and organizational boundaries and may quantify additional needs.

**Baseline & Assumptions:** The equipment/systems to be measured in this indicator will be DOE - owned, and be of \$50K value or greater. In order to establish a defined value base, three strata will be identified from which equipment/systems will be selected: \$50K to <\$1M, \$1M to \$5M and >\$5M. It is also desirable to obtain a representative suite of equipment/systems from across

each of the R&D Divisions, however, each Division will not necessarily contribute equipment systems in each of the value categories. For example, performance measures obtained for R&D equipment valued at >\$1M will come only from the William R. Wiley Environmental Molecular Sciences Laboratory (EHSD) since this is the only place such equipment currently exists. The systems in this category include the IBM SP, the ion accelerator and the 11.5 T FTICR-MS.

Performance: Performance will be based on usage and availability data as well as projections of future use on all equipment/systems identified by DOE-RL in FY99 (following). Performance will not be based on availability or utilization of equipment but rather on the number of data collection points for the 16 instruments/systems included in this performance measure. The data model will be developed in the 1<sup>st</sup> quarter of FY99 and implemented in the 2<sup>nd</sup> quarter.

Historic data will be collected on a monthly basis and will include: 1) "run time", 2) "time available" and 3) "time unavailable". These terms will be defined specifically for each item, but in general, are defined as follows:

1. Run Time – the time during which an instrument or system is in use or is being prepared for use.
2. Time Available – the time during which an instrument or system is either not in use (or being prepared for use) and is operational.
3. Time Unavailable – the time during which an instrument or system is not available for use due to maintenance, repairs, lack of facility services, etc.

Additionally, data will be collected that forecasts the future availability of the equipment. Forecasts will be provided on a monthly basis and will project "Time Available" for the next three months.

Monthly data collection will begin in February 1999. A data collection point is defined as the monthly historical information for a piece of equipment or the forecasting information for a piece of equipment. Each piece of equipment can have two data collection points per month.

For a specific piece of equipment, both historic and forecasting data must be collected for at least six of the eight months. Data collection points will not contribute for those pieces of equipment submitting less than 6 months of data.

Target: 256 data points collected  
Neutral: 188 data points collected  
Minimum: 120 data points collected

Equipment/System List:

- IBM SP (>\$12.5M)
- Ion Accelerator (>\$5M)
- WD29329 11.5 T FT-ICR/MS (\$1.9M)
- WB68822 Perkin Elmer Auger (\$634k)
- WB62779 VG Mass Spectrometer (\$148k)
- WB58199 Philips X-ray Diffraction (\$50k)
- WD14617 Viking Mass Spectrometer (\$150k)
- FA09330 FAME Wind Tunnel (\$113k)
- WD24709 Fisons ICP Mass Spectrometer (\$460k)
- WD06789 Nicolet FT-IR (\$116k)
- WB37395 Jomar Neutron Coincidence Counter (\$83k)
- WD12609 Varian Mass Spectrometer (\$65K)
- WD27601 Thermedic Gas Chromatograph (\$75K)
- WD13096 Rework Machine (\$137k)

- WD28358 Optical Correlator (\$96k)
- WD22262 Eddy Current Tester (\$54k)

**2.2.3 Facilities and Services Integration:** An increased level of interaction with other Hanford Site contractors supporting facility infrastructure and services. (30%)

This Performance Indicator is a composite of four Performance Sub-indicators, designed to provide an overall evaluation of the Laboratory's processes for increasing the laboratories mission capabilities through its facility assets. These Sub-indicators and their specific levels (metrics) are developed by DOE.

**2.2.3.1 Increased level of interaction with other Hanford Site contractors on key issues supporting facility infrastructure and services.**

Description: The Hanford Site Integration Group (SIG) is the principal forum for communication and discussion of cross cutting site technical issues and information. The SIG goal is to produce a Hanford Site Technical Baseline that provides a consistent traceable linkage connecting strategic level documents to the project baseline documents. This connection will establish a vital link between the individual contractors who have responsibilities within the 300 Area. It will also ensure that the S&T infrastructure requirements for the current and future mission will be established and maintained to continue the S&T Mission beyond the site clean-up mission.

Measure:

- 1) A Battelle representative is an active SIG participant;
- 2) Battelle will work with the SIG to make decisions that support the Hanford Site and will provide timely responses to all action items involving Battelle.
- 3) Battelle will provide timely updates to the Battelle Waste Management Project Specification.

Performance: (Outstanding and Neutral Performances require completion of measures 2 and 3.)

Target:	A Battelle representative participates in at least 90 percent of the scheduled SIG meeting.
Neutral:	A Battelle representative participates in at least 75 percent of the scheduled SIG meetings.
Minimum:	Not completing measures 2 or 3 or a Battelle representative attending less than 75 percent of the scheduled SIG meetings.

**2.2.3.2 Minimization of impact to the Laboratory due to site infrastructure failures and future usage by development/deployment of effective System Engineering process.**

Description: A System Engineering process will require Battelle to have appropriate data elements, definitions and mission for each facility. This process will establish the performance requirements needed such as Sitewide services, design, construction, start-up/test, operation, decommissioning/stabilization, and decontamination. This process will also assist in risk management/issues resolution and formalize the implementation of baseline change control, evaluations, and budget/funds management. The implementation and updates of Facility Life Cycle Plans, 15-Year Facility Plan, Strategic Facility Plan, and Institutional Plan for DOE facilities will be required to achieve a



functional System Engineering process. This will ensure that the Battelle infrastructure requirements will not be impacted. These documents will include the strategic outyear analysis for Network Infrastructure Upgrades.

**Measure:** The successful development and completion of the Facility Life Cycle Plans, 15-Year Facility Plan, FY 2000 Strategic Plan, and FY 2000-2004 Institutional Plan for all active Battelle managed DOE EM and ER facilities.

**Performance:** (Outstanding and Neutral Performances require development, update and input to the Institutional Plan, 15-Year Facility Plan, and Strategic Facility Plan.)

**Target:** Develop at least 75 percent of the Life Cycle Plans for EM and ER buildings by the end of FY 1999.

**Neutral:** Develop at least 60 percent of the Life Cycle Plans for EM and ER buildings by the end of FY 1999.

**Minimum:** Not completing the development of any of the following:

- Institutional Plan,
- 15-Year Facility Plan,
- Strategic Facility Plan, and
- less than 60 percent of the Life Cycle Plans for EM and ER buildings by the end of FY 1999.

#### 2.2.3.3 Improve the scope definition and cost of site services by using activity-based and customer-focused methods.

**Description:** These measures highlight Battelle's effort to improve the scope and cost effectiveness of site services by strengthening the link between RL, service providers, and service user-customers. The effort may address a wide range of services including, but not limited to, fire protection, medical, and steam heating. The measures focus on actions under Battelle's direct control, such as developing proposals with input from other Hanford Site players.

**Measures:**

- 1) Submit at least one proposal to the Site Integration Group to involve Hanford customers in the development and evaluation of Hanford Site support services.
- 2) Make at least one proposed site service cost reduction which will benefit the Hanford Site. DOE-RL and other Hanford Site Contractors will be involved in the development to ensure a solid proposal with clearly identified cost savings to the government. The proposal will be presented to DOE-RL in FY 1999.
- 3) Assist DOE-RL in the development and initial test preparation of an approach that accomplishes the above measure.

**Performance:**

Outstanding:	Completion of measures 1, 2, and 3.
Excellent:	Completion of measures 1 and 2.
Good:	Completion of only measure 1.
Marginal:	Completion of only measure 2.
Unsatisfactory:	Not completing measures 1 or 2.

#### 2.2.3.4 Complete Scheduled Network Infrastructure Upgrade Projection Plans and Projects.

Description: Facilities and Operations (F&O) and Information Technology (IT) together prioritized and coordinated the completion of the annual network upgrade projects. These projects require a cross mix of staff to work together to successfully complete the project.

Measure:

- 1) Concurrence on the FY 1999 Network Infrastructure Project Plans by October 31, 1998, from IT Core Program Manager and F&O Program Manager.
- 2) The close out of the approved FY 1999 Network Infrastructure Projects, within 30 days of their approved schedule date.
- 3) Concurrence on the FY 2000 Network Infrastructure Project Plans by June 30, 1999, from IT Core Program Manager and F&O Program Manager.

Baseline & Assumptions:

- 1) "Closed out" projects are defined by the date when all of the work packages associated with that project are closed in the financial system.
- 2) The Network Infrastructure upgrades authorized prior to FY 1999 are listed below:

Project Title  
325 Network Upgrade  
MSL Network Upgrade  
320 Network Upgrade

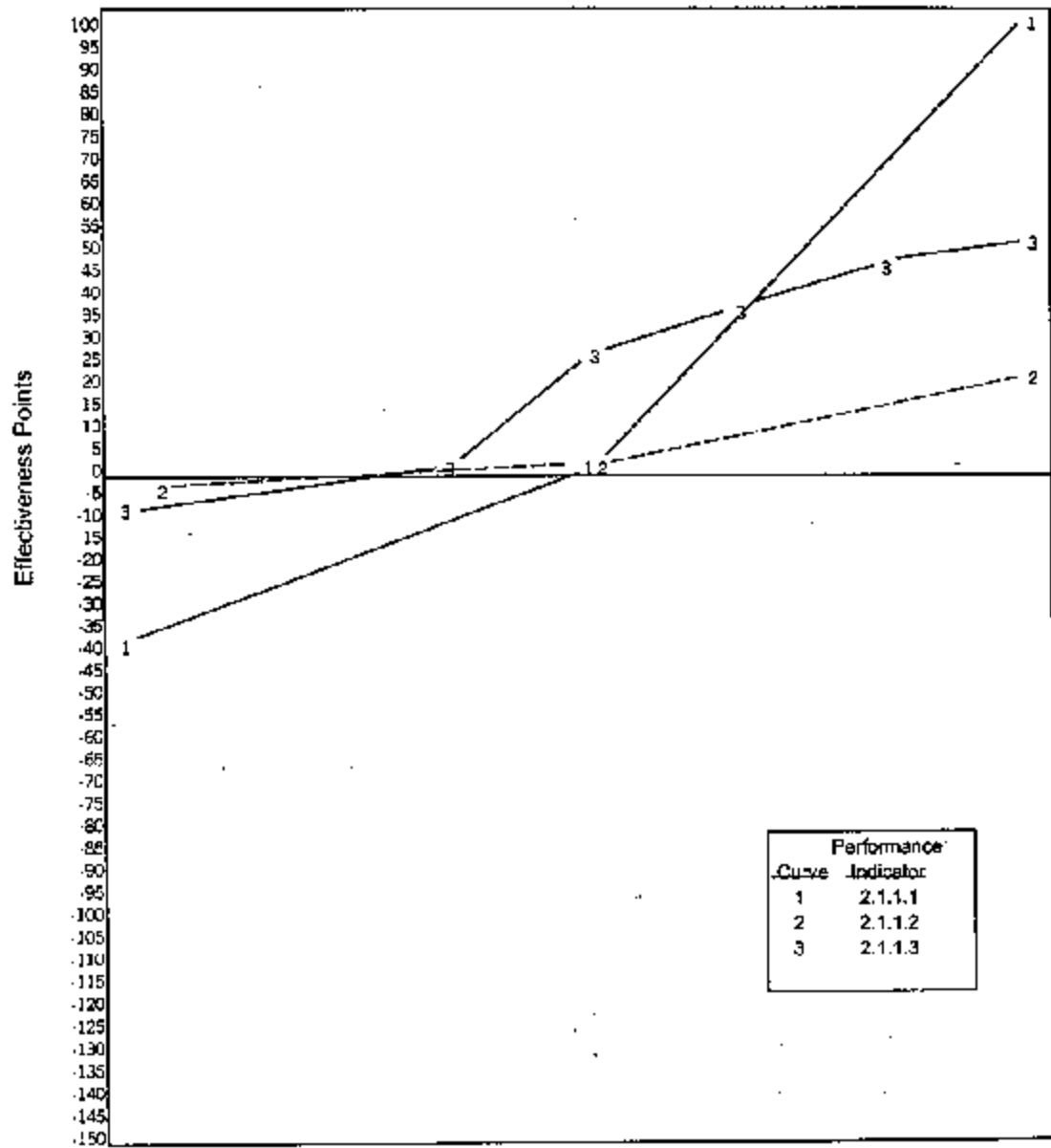
Performance:

Outstanding:	Completion on measures 1, 3, and 100 percent of 2.
Excellent:	Completion on measures 1, 3 and 66 percent of 2.
Good:	Completion on measures 1,3, and 33 percent of 2.
Marginal:	Completion on measures 1 and 3.
Unsatisfactory:	Completing of measure 1 or 2 or 3.

#### Critical Outcome Performance Rating and Additional Performance-Based Fee

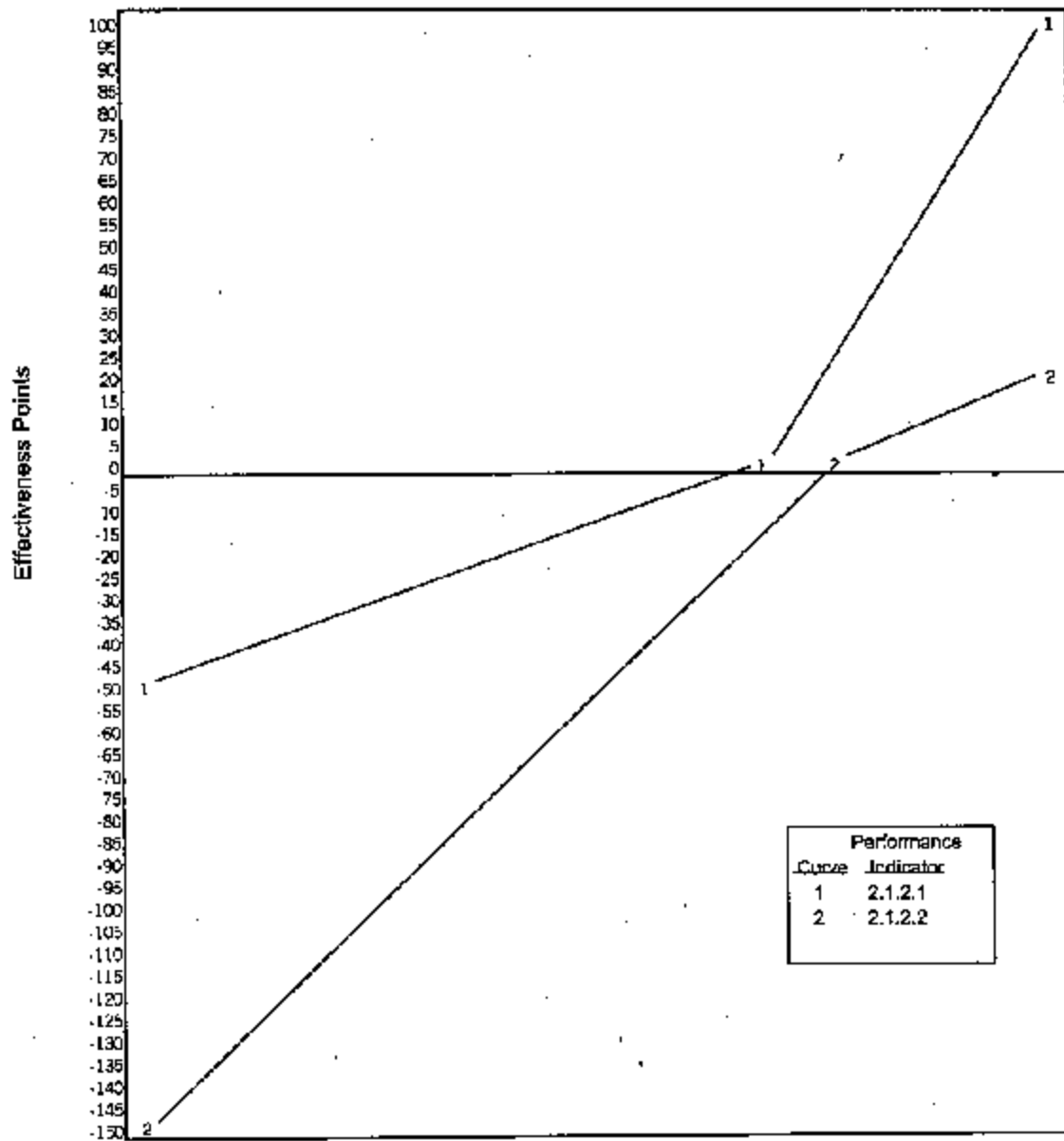
Figures 2A, 2B, 2C, 2D, 2E, 2F, and 2G document the associated agreements on performance expectations in the form of contingency functions. The overall performance rating for this outcome will be determined by summing the effectiveness scores for all Objectives as depicted in Tables 2.1 through 2.8, below, normalizing the scores using Table 2.9 and comparing the normalized sum to the rating scale in Table 2.10. Additional performance-based fee earned (if any) for this outcome is determined by comparing the overall outcome score (5.0 - 3.5) to the amount available within Table 2.11.

Figure 2A, Operational Excellence Objective 2.1, Indicator 2.1.1 Contingency Diagram



Performance Indicator		SCALES															
1	Worker Involvement	125														160	175
2	Dose Index (delta)		0.8				0.5				0.4				0.3		0.2
3	SBMS User Involvement		3%			35%			40%		45%			50%		55%	50%

Figure 2B, Operational Excellence Objective 2.1, Indicator 2.1.2 Contingency Diagram

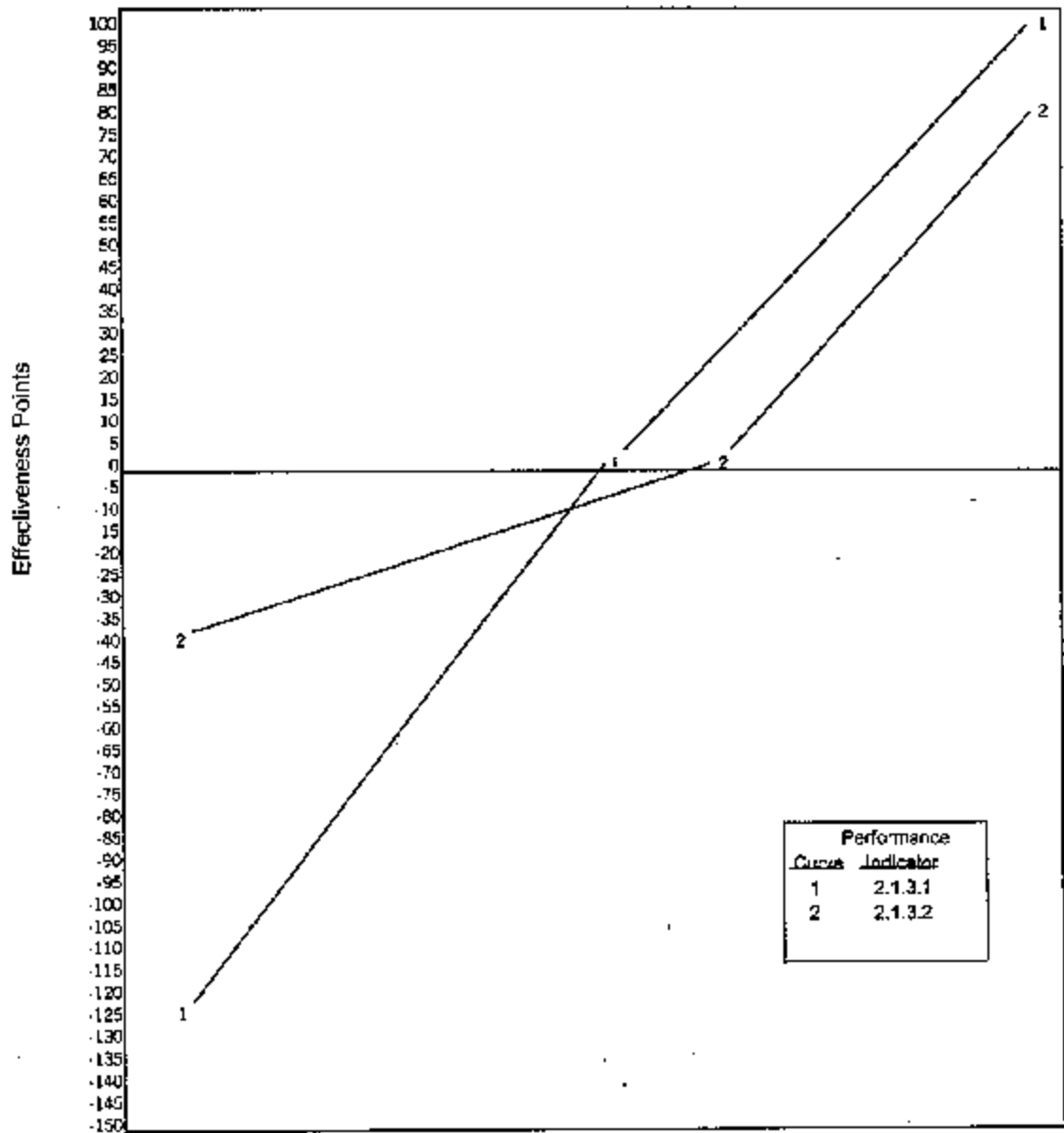


Performance Indicator  
1 SDTP and Required  
2 ES&H Training Courses

SCALES

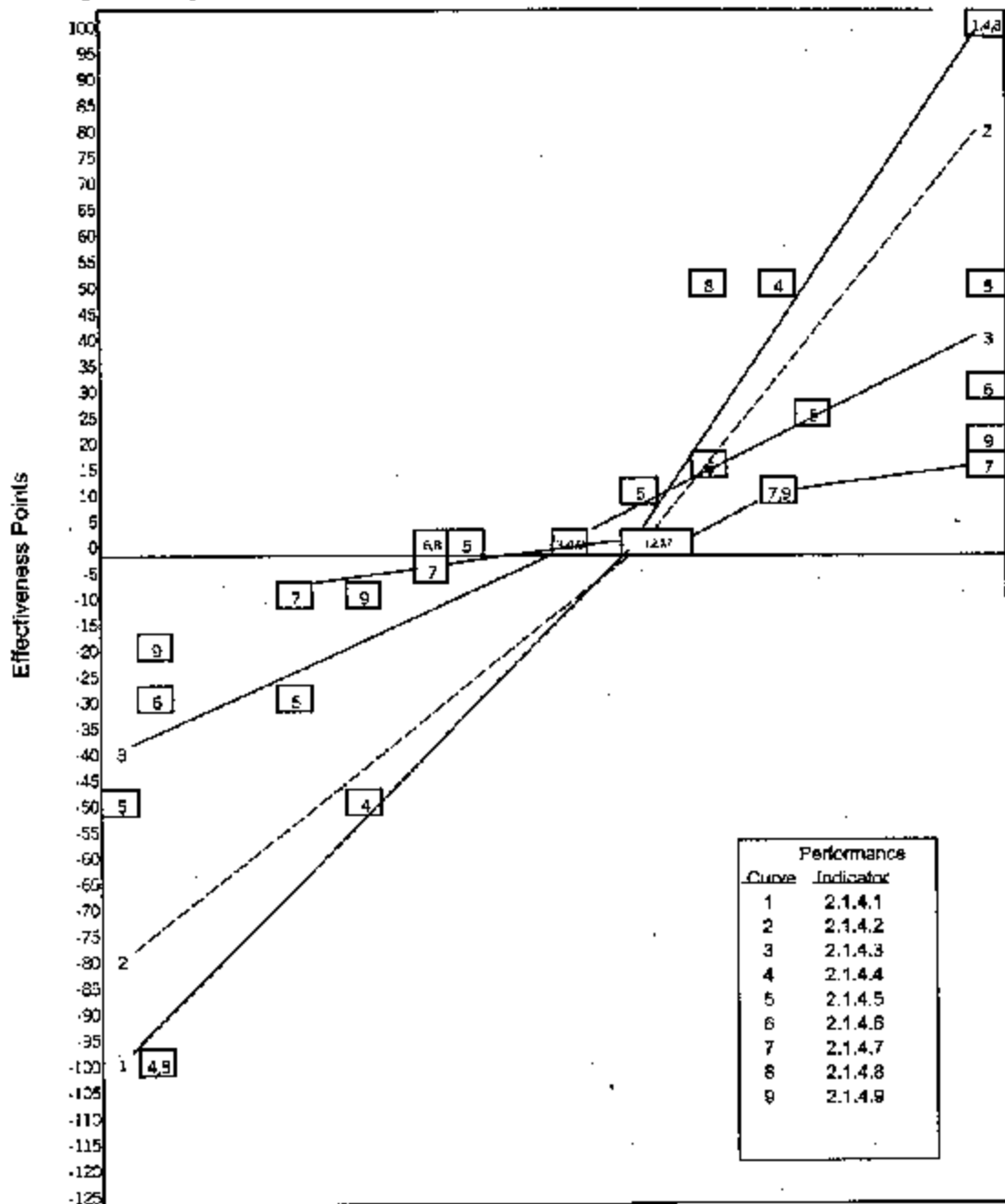
30%						75%						80%					85%
70%						75%						80%					85%

Figure 2C, Operational Excellence Objective 2.1, Indicator 2.1.3 Contingency Diagram



Performance Indicator		SCALES															
1	Chemical Mgmt System		75%					80%					95%				99%
2	Generator Mgmt of Jars		90%			91%		92%		93%		94%		95%		96%	97%

Figure 2D, Operational Excellence Objective 2.1, Indicator 2.1.4 Contingency Diagram

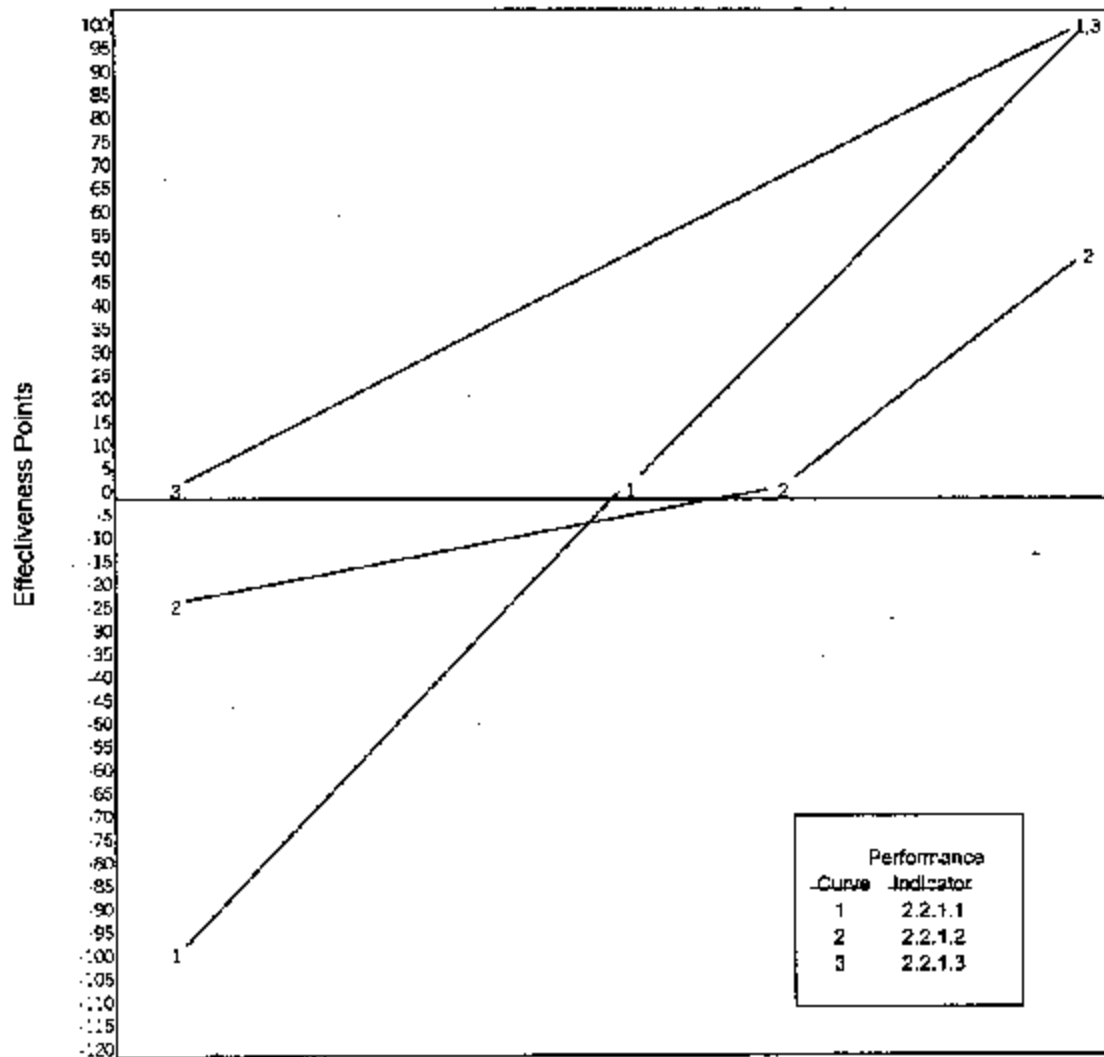


Performance Indicator

SCALES

1 Lost Work Day Case Rate	1.7				1.6				1.5				1.4			1.3			1.2
2 Recordable Case Rate	2.8				2.7				2.6				2.5			2.4			2.3
3 Lost Work Day Incident Rate		40										30							20
4 Unplanned Doses		4				3						2				1			0
5 Spread of Rad Contam.		7				6				5			4			3			2
6 Loss of Rad Sources		3							2					1					0
7 Skin & Clothing Con Events					15	14		13	12	11	10	9	8	7	6	5			4
8 Environmental Protection		4						3					2						1
9 Transport of DOE Haz Mat		6						5			4			3					2

Figure 2E, Operational Excellence Objective 2.2, Indicator 2.2.1 Contingency Diagram



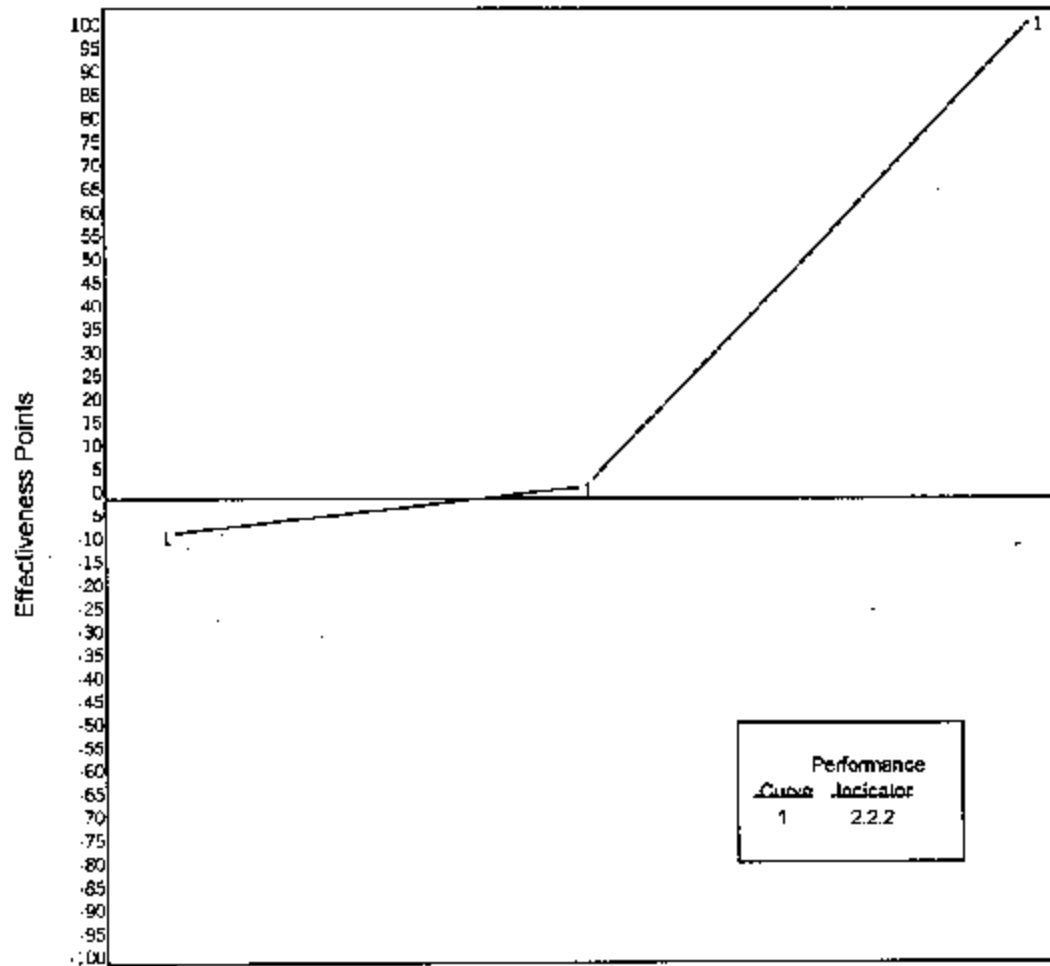
Performance Indicator

- 1 Office space per staff
- 2 Staff "Churn" Rate
- 3 Benchmarking

SCALES

147	151	143	141	139	137	135	133	131	129	127	125	123
65%				60%				55%				50%
0			2			4			6			8

Figure 2F, Operational Excellence Objective 2.2, Indicator 2.2.2 Contingency Diagram



Performance	
Curve	Indicator
1	2.2.2

Performance Indicator

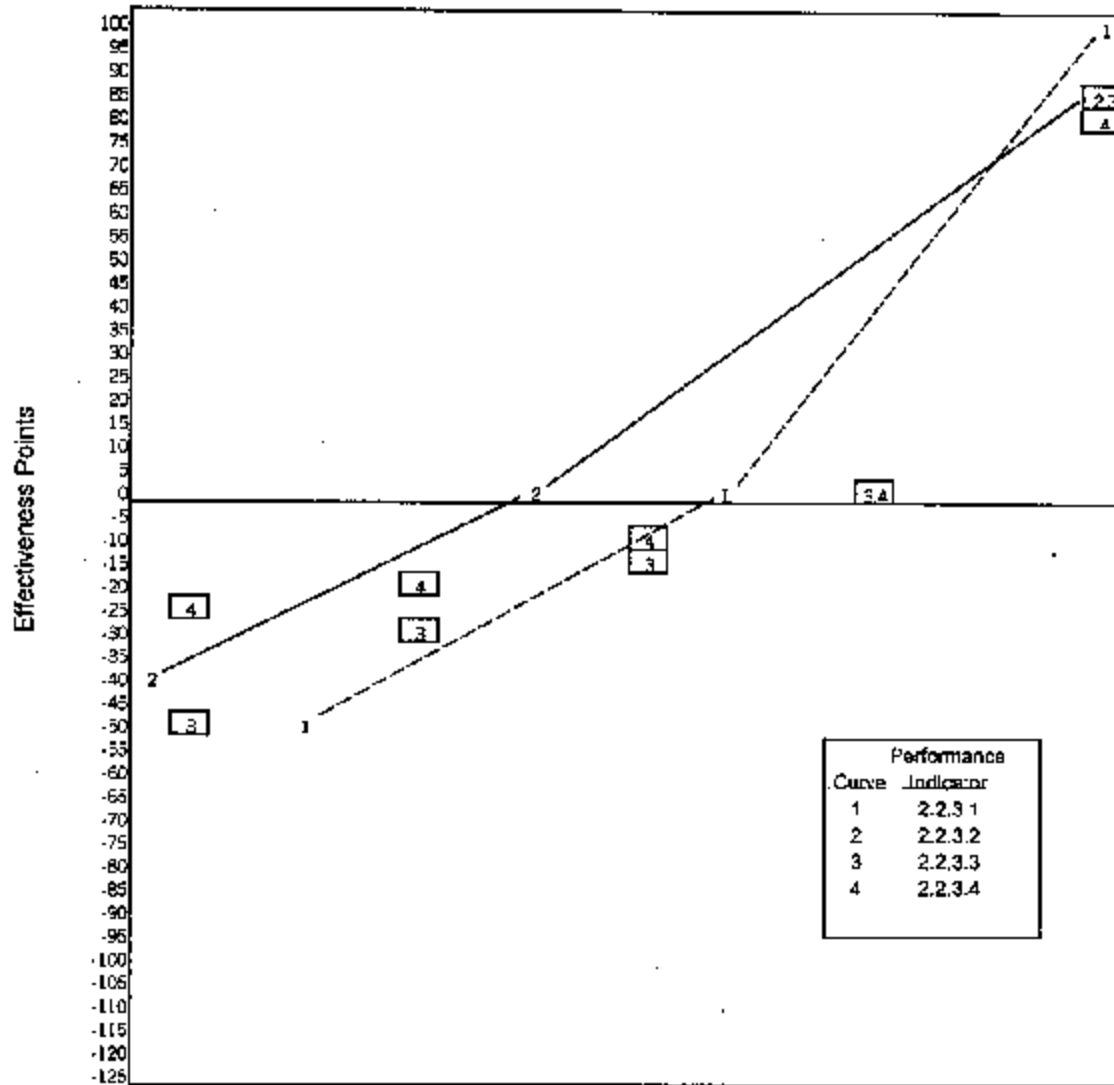
- 1 Capacity Utilization data  
Obtained

SCALES

118	124	130	136	142	148	154	160	166	172	178	184	190	196	202	208	214	220	226	232	238	244	250	256
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



Figure 2G, Operational Excellence Objective 2.2, Indicator 2.2.3 Contingency Diagram



Performance Indicator

- 1 Level of Interaction
- 2 Minimization of Impact
- 3 Improve the scope
- 4 Network Infrastructure

SCALES

				70%				75%					80%				85%				90%
50%				55%				60%					65%				70%				75%
	U					M				G					E					O	
	U					M				G					E					O	

ELEMENT	Performance Level	Effectiveness Score	Value Points
2.1.1 Worker involvement, knowledge, and culture relative to ES&H			
2.1.1.1 Management interactions with workers to ensure staff involvement in work planning, knowledge of requirements and attitude/culture relative to ES&H			
2.1.1.2 Dose Index			
2.1.1.3 User involvement in SBMS Subject Area development			
	Composite Total		

Table 2.1 - Objective 2.1, Indicator 2.1.1 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points
2.1.2 ES&H training commensurate with assigned responsibilities			
2.1.2.1 Completion of SDTP and required ES&H training			
2.1.2.2 Completion of ES&H Training Courses			
	Composite Total		

Table 2.2 - Objective 2.1, Indicator 2.1.2 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points
2.1.3 Material Control			
2.1.3.1 Chemical Management System			
2.1.3.2 Generator management of SAA (Slop Jars)			
	Composite Total		

Table 2.3 - Objective 2.1, Indicator 2.1.3 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points
<b>2.1.4 ES&amp;H Lagging Performance Indicators</b>			
2.1.4.1 OSHA Lost Workday Case Incidence Rate (Lost Workday Case Rate)			
2.1.4.2 OSHA Recordable Case Incidence Rate (Recordable Case Rate)			
2.1.4.3 OSHA Lost Workday Incidence Rate (Lost Workday Rate)			
2.1.4.4 Unplanned Doses			
2.1.4.5 Spread of Radioactive Contamination			
2.1.4.6 Loss of Radioactive Sources			
2.1.4.7 Skin and Personal Clothing Contamination Events			
2.1.4.8 Environmental Protection			
2.1.4.9 Transportation of DOE Hazardous Materials			
	<b>Composite Total</b>		

Table 2.4 - Objective 2.1, Indicator 2.1.4 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points
<b>2.2.1 Facilities (Buildings): Utilization of space is commensurate with science and technology mission needs</b>			
2.2.1.1 Total office space assigned per number of staff members in an organization			
2.2.1.2 Staff Churn Rate			
2.2.1.3 Continuous improvement in F&O services and operations realized from benchmarking			
	<b>Composite Total</b>		

Table 2.5 - Objective 2.2, Indicator 2.2.1 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points
<b>2.2.2 R&amp;D Equipment Utilization</b>			
	<b>Composite Total</b>		

Table 2.6 - Objective 2.2, Indicator 2.2.2 Performance Rating Development

ELEMENT	Performance Level	Effectiveness Score	Value Points
<b>2.2.3 Infrastructure: Physical asset acquisitions and modifications follow an integrated and systematic process</b>			
2.2.3.1 Increased level of interaction with other Hanford Site contractors on key issues supporting facility infrastructure and services			
2.2.3.2 Minimization of impact to the Laboratory due to site infrastructure failures and future usage by development/deployment of effective System Engineering process			
2.2.3.3 Improve the scope definition and cost of site services by using activity-based and customer-focused methods			
2.2.3.4 Complete Scheduled Network Infrastructure Upgrade Projection Plans and Projects			
	<b>Composite Total</b>		

Table 2.7 - Objective 2.2, Indicator 2.2.3 Performance Rating Development

ELEMENT	Value Points Tables 2.1-2.7	Weight	Performance Level	Effectiveness Score	Value Points	Obj. Weight	Weighted Points
<b>2.0 Operational Excellence</b>							
<b>2.1 Sustain and enhance operational excellence in safety and health, and environmental protection</b>							
2.1.1 Composite from Table 2.1		30%					
2.1.2 Composite from Table 2.2		30%					
2.1.3 Composite from Table 2.3		30%					
2.1.4 Composite from Table 2.4		10%					
			<b>Obj 2.1 Total</b>			67%	
<b>2.2 Increase mission capabilities through enhancement and effective use of Laboratory facilities and equipment</b>							
2.2.1 Composite from Table 2.5		60%					
2.2.2 Value from Table 2.6		10%					
2.2.3 Composite from Table 2.7		30%					
			<b>Obj 2.2 Total</b>			33%	
						<b>Total</b>	

Table 2.8 Operational Excellence Critical Outcome Performance Rating Development

2.1.1 Worker Involvement relevant to ES&H	2.1.2 ES&H Training	2.1.3 Material Control	2.1.4 ES&H Lagging Indicators	2.2.1 Utilization of Space	2.2.2 R&D Equipment Utilization	2.2.3 Physical asset acquisitions	Rating
170	120	180	535	250	100	350	5.0
162	114	171	508	238	95	333	4.9
153	108	162	482	225	90	315	4.8
145	102	153	455	213	85	298	4.7
136	96	144	428	200	80	280	4.6
128	90	135	401	188	75	263	4.5
119	84	126	375	175	70	245	4.4
111	78	117	348	163	65	228	4.3
102	72	108	321	150	60	210	4.2
94	66	99	294	138	55	193	4.1
85	60	90	268	125	50	175	4.0
77	54	81	241	113	45	158	3.9
68	48	72	214	100	40	140	3.8
60	42	63	187	88	35	123	3.7
51	36	54	161	75	30	105	3.6
43	30	45	134	63	25	88	3.5
34	24	36	107	50	20	70	3.4
26	18	27	80	38	15	53	3.3
17	12	18	54	25	10	35	3.2
9	6	9	27	13	5	18	3.1
0	0	0	0	0	0	0	3.0
-3	-10	-8	-27	-6	-1	-8	2.9
-6	-20	-17	-53	-13	-1	-17	2.8
-8	-30	-25	-80	-19	-2	-25	2.7
-11	-40	-33	-106	-25	-2	-33	2.6
-14	-50	-41	-133	-31	-3	-41	2.5
-17	-60	-50	-159	-38	-3	-50	2.4
-19	-70	-58	-186	-44	-4	-58	2.3
-22	-80	-66	-212	-50	-4	-66	2.2
-25	-90	-74	-239	-56	-5	-74	2.1
-28	-100	-83	-265	-63	-5	-83	2.0
-30	-110	-91	-292	-69	-6	-91	1.9
-33	-120	-99	-318	-75	-6	-99	1.8
-36	-130	-107	-345	-81	-7	-107	1.7
-39	-140	-116	-371	-88	-7	-116	1.6
-41	-150	-124	-398	-94	-8	-124	1.5
-44	-160	-132	-424	-100	-8	-132	1.4
-47	-170	-140	-451	-106	-9	-140	1.3
-50	-180	-149	-477	-113	-9	-149	1.2
-52	-190	-157	-504	-119	-10	-157	1.1
-55	-200	-165	-530	-125	-10	-165	1.0

Table 2.9 - Operational Excellence Critical Outcome Score Normalization Table

<b>Total Score</b>	5.0 - 4.5	4.4 - 3.5	3.4 - 2.5	2.4 - 1.5	1.4 - 1.0
<b>Final Rating</b>	Outstanding	Excellent	Good	Marginal	Unsatisfactory

**Table 2.10 - Operational Excellence Critical Outcome Final Rating**

<b>Outcome Rating</b>	<b>Score</b>	<b>Performance-Based Fee</b>
<b>Outstanding</b>	5.0	\$280,000
	4.9	\$262,500
	4.8	\$245,000
	4.7	\$227,500
	4.6	\$210,000
	4.5	\$192,500
<b>Excellent</b>	4.4	\$175,000
	4.3	\$157,500
	4.2	\$140,000
	4.1	\$122,500
	4.0	\$105,000
	3.9	\$87,500
	3.8	\$70,000
	3.7	\$52,500
	3.6	\$35,000
	3.5	\$17,500
<b>Good or Less</b>	3.4	\$0

**Table 2.11 - Operational Excellence Critical Outcome Additional Performance-Based Fee Matrix**

### 3.0 LEADERSHIP AND MANAGEMENT (20%)

#### Critical Outcome

Battelle will provide leaders/managers and produce efficient management systems that effectively support employees in the performance of their mission responsibility.

Modification: The objectives, indicators and expected levels of performance identified below have been developed based on the best information available at the time. Should circumstances arise which require modifications to any of the objectives, indicators and/or expected levels of performance within this outcome it shall be accomplished through the approved change control process described within this document. If the Parties cannot reach agreement on the changes the Contracting Officer shall have the right to make reasonable changes as specified within the contract DE-AC06-76RLRL01830.

- 3.1 Objective - Battelle will provide leadership and management to foster a work environment that optimizes staff satisfaction and individual contribution. (30%)

#### Performance Indicators

##### 3.1.1 Staff separations rate

Description: Using Saratoga Institute data, Battelle will measure retention performance against similar organizations. Specifically, the percentage of voluntary separations of both full-time and part-time head count will be compared to the mean separation rate for R&D as reported in the 1999 Edition of the Saratoga Institute, "Human Resources Financial Report," Voluntary Separation Rate (Total) Section.

Performance:

Ratings will be based on the mid-point of the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles.

Rating	Score
Outstanding	At or below 17.5 percentile of SI data
Excellent	At or below 27.5 percentile of SI data
Good	At or below 62.5 percentile of SI data
Marginal	At or below 87.5 percentile of SI data
Unsatisfactory	At or below 97.5 percentile of SI data

Performance-Related Assumptions: None Identified

##### 3.1.2 Personal/Professional Development

Description: The percentage of staff reporting positive perceptions in the spring 1999 QWL survey for Personal/Professional Development as compared to R&D normative trends provided by ISR:

**Performance:**

<u>Rating</u>	<u>Score</u>
Outstanding	Composite percentage positive response is at or above one (1) standard deviation above the mean
Excellent	Composite percentage positive response is at or above the mean
Good	Composite percentage positive response is at or above one (1) standard deviation below the mean
Marginal	Composite percentage positive response is at or above two (2) standard deviations below the mean
Unsatisfactory	Composite percentage positive response is at or above three (3) standard deviations below the mean

- 3.2 Objective - Battelle Leadership provides effective management systems to drive improvements enabling DOE to optimize oversight activities. (40%)

**Performance Indicators**

- 3.2.1 Contractor's independent annual averaged rating of Laboratory and Division/Directorate Self-Assessment effectiveness.

Description: Organizations who use the self-assessment process within the Integrated Assessment (IA) management system are provided with key information as they determine overall organizational health to define where opportunities exist to drive improvement. To assess the effectiveness of this process, the IA management system owner and DOE-AMT will collaboratively evaluate each of the Laboratory's 12 organizations (emphasizing elements of the Customer Service Model) on two categories of the IA framework. The evaluation will be conducted against the assessment and evaluation framework defined within the Laboratory's Standards Based Management System (SBMS) for the following categories and potential maximum points:

- Information and Analysis (85 points)
- Business Results (450 points)

Additionally, an independent evaluation will be conducted at the Laboratory level for a single category within the same framework:

- Leadership (125 points)

The results of individual organization evaluations will be averaged and added to the single Laboratory-level evaluation to provide a measure of the effectiveness of the Laboratory's implementation of the Integrated Assessment management system.

Performance Expectation Related Assumptions: The best score anticipated for FY 1999 is a combined score for the three categories of 330 points. This combined score falls within the rigorous 50% scoring band. This would be considered outstanding performance. The lowest scoring band anticipated in developing the performance range is the 10% scoring band (66 points).

**Performance:**

Target: 330  
Neutral: 198  
Minimum: 66



3.2.2 DOE's satisfaction with the implementation of the Contractor's self-assessment process.

Description: DOE-RL counterparts of the Laboratory research divisions and management systems will be surveyed annually. This survey will address the following areas:

- DOE involvement in the Contractors' self-assessment process addressing the development of assessment plans
- DOE involvement in the Contractors' self-assessment process addressing their participation in conducting assessments
- DOE involvement in the Contractors' self-assessment process addressing their partnering in the review of the assessment results
- DOE involvement in the Contractors' self-assessment process addressing their involvement in the development of improvement plans
- DOE staff member level of understanding of the self-assessment processes
- DOE staff member level of satisfaction with their overall involvement in the self-assessment process
- DOE level of satisfaction with the Contractors' effort in using self-assessment to effect improvement.

Performance Expectation Related Assumptions: The targeted level of performance for this indicator is a DOE-RL satisfaction rating of 3 or higher on a 5-point scale.

Performance:

Target:	90% rating 3 or higher on a 5-point scale
Neutral:	65% rating 3 or higher on a 5-point scale
Minimum:	40% rating 3 or higher on a 5-point scale

3.2.3 Staff satisfaction with internal products, services, and systems from Laboratory management systems.

Description: Feedback from Laboratory internal customers of the products and services delivered by internal Laboratory management systems will be obtained through the use of a composite set of questions taken from the annual staff Quality of Work Life (QWL) survey. The survey will use a 5 point Likert scale and will be administered during the 2<sup>nd</sup> quarter of the fiscal year. The survey questions shall be developed and approved by DOE-RL/MET, in partnership with the Laboratory Director of Quality.

Performance Expectation Related Assumptions: There is some discussion about changing this survey to be oriented around individual management systems rather than being generalized around all laboratory internal products, processes, and systems. Until that decision is made jointly by DOE and PNNL, this indicator will not change.

Performance:

Target:	3.7
Neutral:	3.3
Minimum:	3.2

3.3 Objective – Battelle leadership and management promote open and effective business operations. (30%)

### Performance Indicators

#### 3.3.1 Research/support staff labor ratio

Description: The ratio of staff dollars expended on research activities relative to staff dollars expended on support activities.

This indicator will be based on the total labor cost of all staff plus Associated Western University (AWU) students that charge to research activities. Research activities are defined as all client funded projects including capital, Laboratory directed research and development (LDRD) projects, internal research and development (IR&D), the program management portion of program development and management, and that portion of service center labor (including B&U) which is charged direct to client funded projects. All other staff labor cost will be considered support. Labor cost will be the actual labor dollars charged to the activities as described above.

Formula: Research labor cost divided by support labor cost.

Performance Expectation Related Assumptions: Two assumptions have been used in the development of this indicator, however, adjustments to year-end actuals will be made:

1. Base salary escalation will be about 3.1% in FY99.
2. The benefit rate will remain at 28% in FY99.

Performance:

Target:	2.60
Neutral:	2.50
Minimum:	2.40

#### 3.3.2 Average cost per research FTE

Description: The total average cost charged per full time equivalent charging to research activities.

This indicator will be based on total Laboratory costs under the 1830 contract less direct funded capital and construction costs, subcontracts and other Hanford contractor costs, single procurements greater than \$1M, and specific one time only costs directed by the Department of Energy (ex. ROF costs). Full time equivalents will be based on labor hours charged by Laboratory staff and AWU students to research activities excluding those hours charged to capital or construction projects and 1831 research activities.

Formula: Total 1830 costs less direct funded capital and construction costs, less direct funded subcontracts and other Hanford contractor costs, less direct funded single procurements greater than \$1M, and less one time only DOE directed costs divided by 1830 research activities labor hours divided by 1832. Research activities are defined as all client funded projects including capital, Laboratory directed research and development (LDRD) projects, internal research and development (IR&D), the program management portion of program development and management, and that portion of service center labor (including B&U) which is charged direct to client funded projects.

Performance Expectation Related Assumptions: A single assumption was used in the development of this indicator.

1. A full time equivalent = 1832 hours

Performance:

Target: \$122  
Neutral: \$127  
Minimum: \$132

3.3.3 DOE's evaluation of overall Contractor performance in the business management functional areas.

Description: This indicator will measure the overall effectiveness/performance of the business management (BMOP) functions in delivering products and services and complying with applicable requirements as viewed by the cognizant DOE RL business management organizations. The BMOP functions include:

DOE-RL	PNNL	BUSINESS MANAGEMENT (BMOP) ACTIVITIES
SID/OEA	Facilities & Operations	1. Administrative Services (including mail, printing, record access and library)
OEA	Education & External Rel.	2. Congressional, Public, and Intergovernmental Affairs - (including openness, whistle blower protection, and public participation)
HRM	HR	3. Diversity
BUD/CFR/FMD	Finance and Internal Audit	4. Finance, Budget, and Internal Audit
SID	Energy/IT	5. Information Management/Y2K
MET/PID	Strat. Planning	6. Laboratory and Institutional Business Planning
PMD/SID	Facilities	7. Life Cycle Assets Management
HRM/OTR	HR	8. Manpower and Personnel (including training)
SAS/STP	National Security	9. Nonproliferation and National Security which includes the following: - Nuclear Safeguards and Security - Classification/Declassification - Emergency Management
SID	Finance	10. Personal Property
PRO/CFR	Legal & Cont.	11. Procurement
OEA	Comm.	12. Scientific and Technical Information Administration
STP	Econ. Dev.	13. Technology Partnerships Administration
CWP/MET	HR/Econ. Dev.	14. Worker and Community Transition
FMD/SIP	Legal & Cont.	15. Work-for-Others Administration
OCC	Legal & Cont.	16. Legal and Patent Services

**Performance Rating Measurement:** Performance against this Performance Indicator will be measured by the averaged adjectival rating assigned to each of the business management functions listed above. Each of the sixteen BMOP functional activities reviewed will be asked to provide an adjectival rating as follows:

Outstanding	-	5
Excellent	-	4
Good	-	3
Marginal	-	2
Unsatisfactory	-	1

The overall business management functions rating will be determined by the average of all reviewed areas. All business functions shall be weighted equally.

**Baseline Information:** FY 1998 was the first year for this performance indicator. All DOE-RL business management organizations were asked to provide a rating on the overall effectiveness and performance of their respective contractor BMOP functions. Of those that participated, the final rating was determined by the average of all reviewed areas. All business functions were weighted equally. The final weighted score for FY 1998 was 4.3.

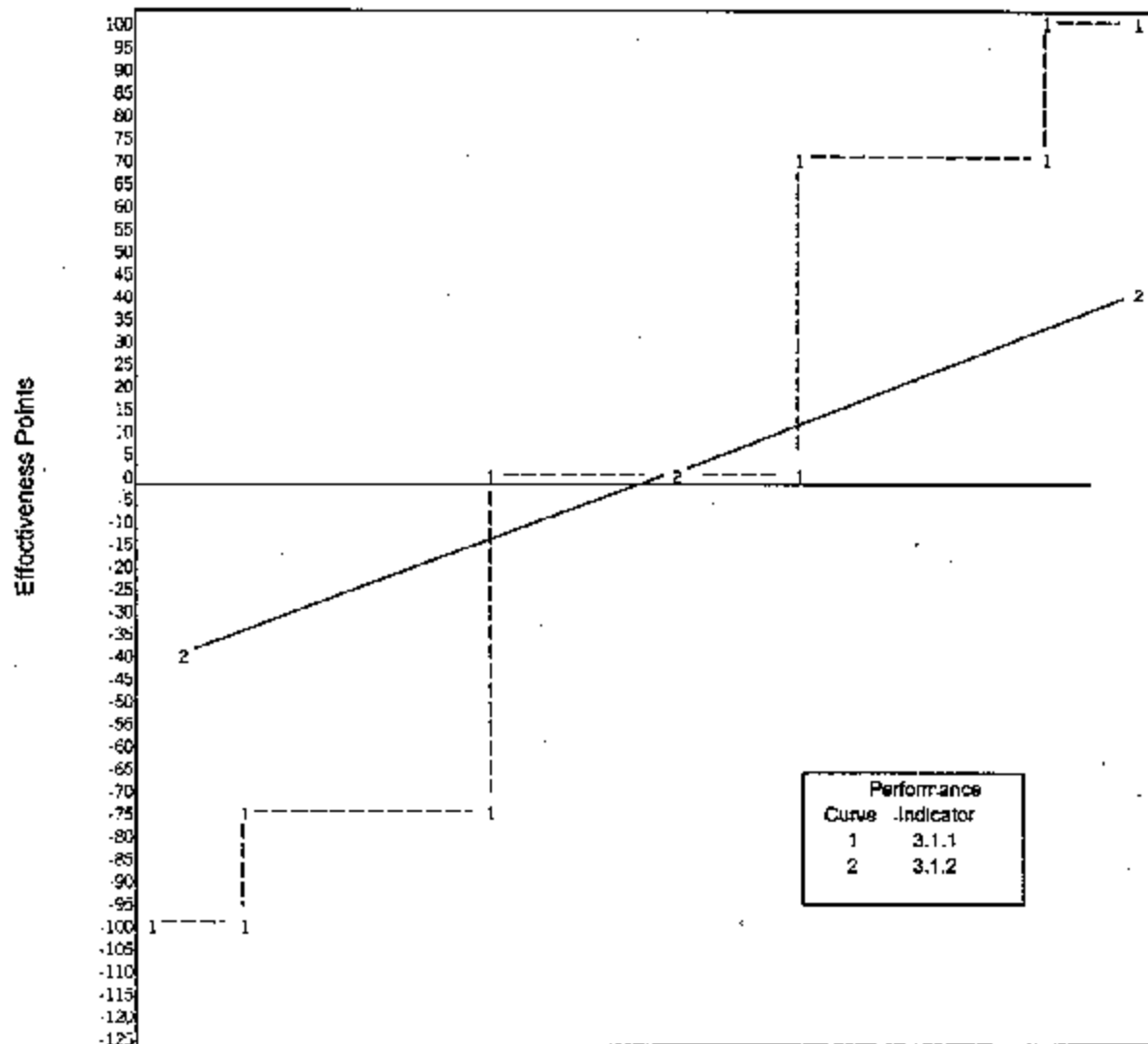
**Performance:**

Target:	4.5
Neutral:	3.7
Minimum:	3.0

#### **Critical Outcome Performance Rating and Additional Performance-Based Fee**

Figures 3A, 3B and 3C document the associated agreements on performance expectations in the form of contingency functions. The overall performance rating for this outcome will be determined by summing the effectiveness scores for all Objectives as depicted in Table 3.1, below, normalizing the scores using Table 3.2 and comparing the normalized sum to the rating scale in Table 3.3. Additional performance-based fee earned (if any) for this outcome is determined by comparing the overall outcome score (5.0 – 3.5) to the amount available within Table 3.4.

Figure 3A, Leadership and Management Objective 3.1, Contingency Diagram



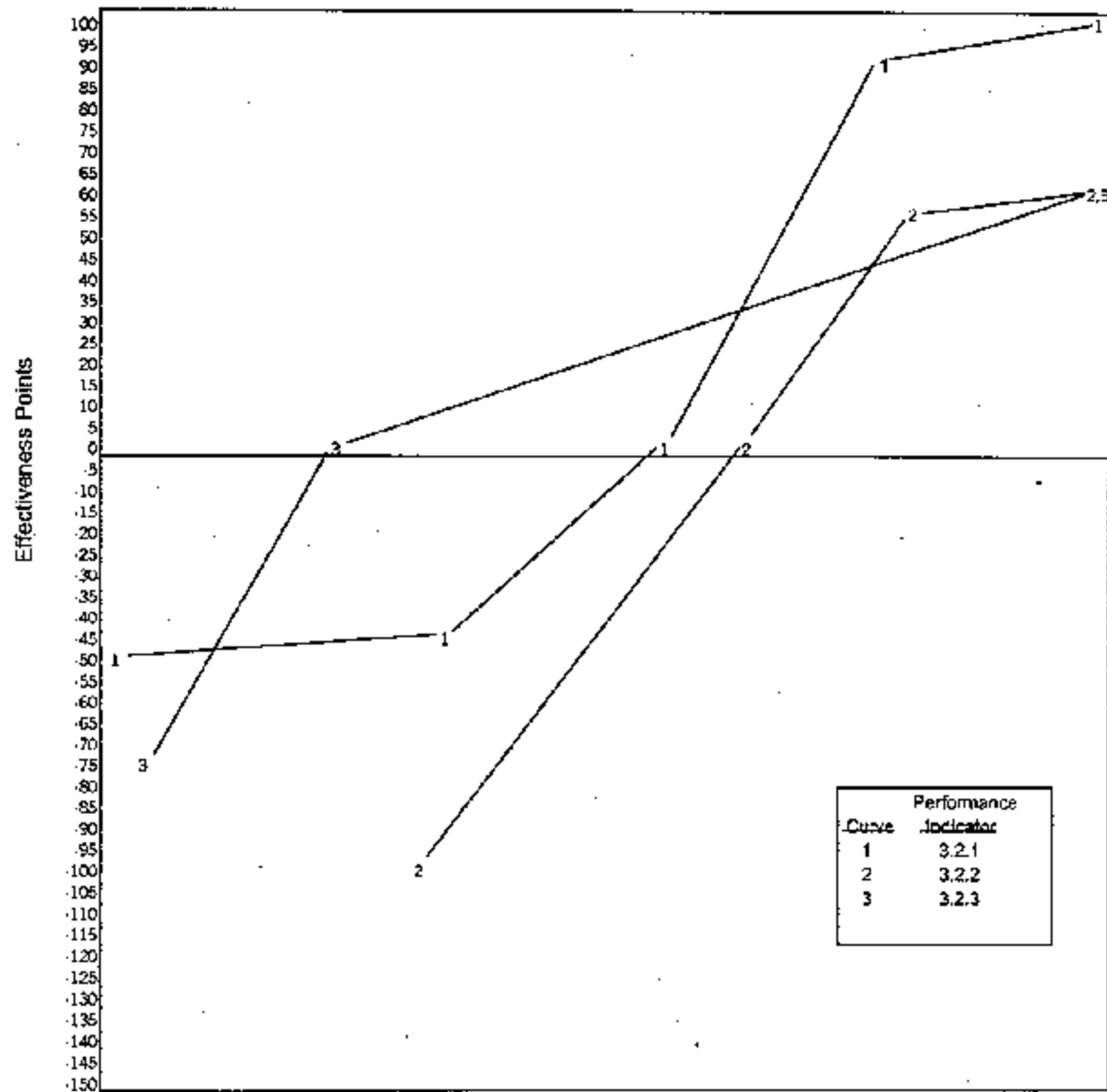
Performance Indicator

- 1 Staff Separation Rate (%)  
2 Perform. Feedback (S.D.)

SCALES

90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10
-3.0		2.5		2.0		1.5		1.0		0.5		M		0.5		1

Figure 3B, Leadership and Management Objective 3.2, Contingency Diagram

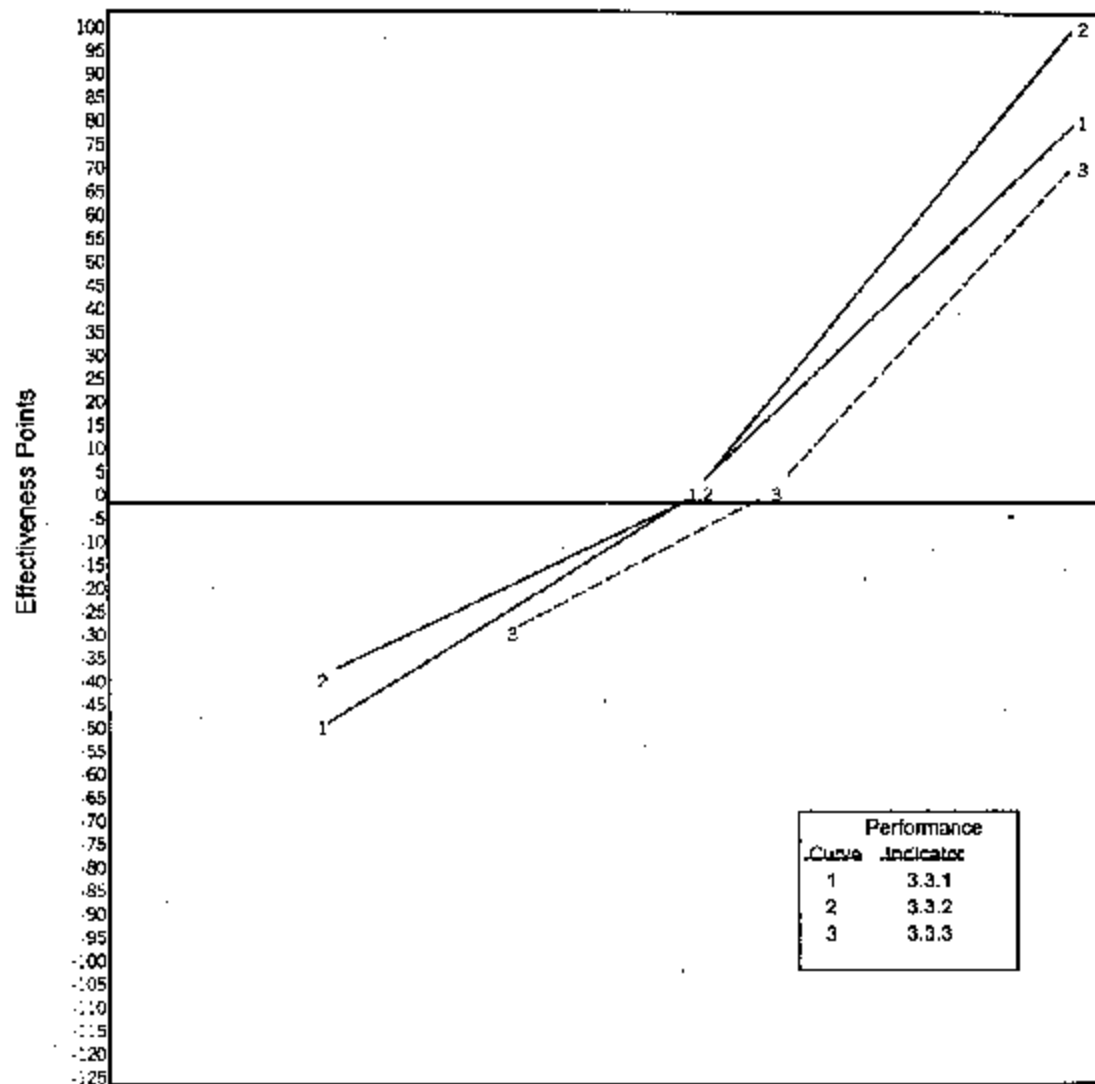


Performance Indicator

SCALES

Eval of IA Effect				66						132									198								264						330
DQE Sat with IA					30	34	38	42	46	50	54	58	62	66	70	74	78	82	86	90													
Staff Sat of MS	3.2						3.3				3.4				3.5				3.6							3.7							

Figure 3C, Leadership and Management Objective 3.3, Contingency Diagram

**Performance Indicator****SCALES**

- 1 Research/Support Ratio  
 2 Ave. Cost per FTE  
 3 Feedback from BMO

SIZES																	
				2.40	2.42	2.44		2.46	2.48	2.50	2.52	2.54		2.56	2.58	2.60	
				132	131	130		129	128	127	126	125		124	123	122	
								3.0	3.2	3.4	3.5	3.6		4.0	4.2	4.4	4.5

ELEMENT	Performance Level	Effectiveness Score	Value Points	Weight	Weighted Points
<b>3.0 Leadership and Management</b>					
<b>3.1 Battelle will provide leadership &amp; management to foster a work environment that optimizes staff satisfaction and individual contribution.</b>					
3.1.1 Staff separation rate					
3.1.2 Personal/Professional Development					
	<b>Obj 3.1 Total</b>			30%	
<b>3.2 Battelle Leadership provides effective management systems to drive improvements enabling DOE to optimize oversight activities</b>					
3.2.1 Contractor's independent annual averaged rating of Laboratory and Division/Directorate Self- Assessment effectiveness.					
3.2.2 DOE's satisfaction with the implementation of the Contractor's self-assessment process					
3.2.3 Staff satisfaction with internal products, services, and systems from Laboratory management systems					
	<b>Obj 3.2 Total</b>			40%	
<b>3.3 Battelle leadership and management promote effective business operations</b>					
3.3.1 Research/Support staff labor ratio					
3.3.2 Average cost per research FTE					
3.3.3 DOE's evaluation of overall Contractor performance in the business management functional areas					
	<b>Obj 3.3 Total</b>			30%	
				<b>Total</b>	

Table 3.1 - Leadership and Management Critical Outcome Performance Rating Development



Objective 3.1	Objective 3.2	Objective 3.3	Value Points
133	209	238	4.9
126	198	225	4.8
119	187	213	4.7
112	176	200	4.6
105	165	188	4.5
98	154	175	4.4
91	143	163	4.3
84	132	150	4.2
77	121	138	4.1
70	110	125	4
63	99	113	3.9
56	88	100	3.8
49	77	88	3.7
42	66	75	3.6
35	55	63	3.5
28	44	50	3.4
21	33	38	3.3
14	22	25	3.2
7	11	13	3.1
0	0	0	3
-7	-11	-6	2.9
-14	-23	-12	2.8
-21	-34	-18	2.7
-28	-45	-24	2.6
-35	-56	-30	2.5
-42	-68	-36	2.4
-49	-79	-42	2.3
-56	-90	-48	2.2
-63	-101	-54	2.1
-70	-113	-60	2
-77	-124	-66	1.9
-84	-135	-72	1.8
-91	-146	-78	1.7
-98	-158	-84	1.6
-105	-169	-90	1.5
-112	-180	-96	1.4
-119	-191	-102	1.3
-126	-203	-108	1.2
-133	-214	-114	1.1
-140	-225	-120	1

Table 3.2 - Leadership and Management Critical Outcome Score Normalization Table

<b>Total Score</b>	<b>5.0 - 4.5</b>	<b>4.4 - 3.5</b>	<b>3.4 - 2.5</b>	<b>2.4 - 1.5</b>	<b>1.4 - 1.0</b>
<b>Final Rating</b>	<b>Outstanding</b>	<b>Excellent</b>	<b>Good</b>	<b>Marginal</b>	<b>Unsatisfactory</b>

**Table 3.3 - Leadership and Management Critical Outcome Final Rating**

<b>Outcome Rating</b>	<b>Score</b>	<b>Performance-Based Fee</b>
<b>Outstanding</b>	5.0	\$280,000
	4.9	\$262,500
	4.8	\$245,000
	4.7	\$227,500
	4.6	\$210,000
	4.5	\$192,500
<b>Excellent</b>	4.4	\$175,000
	4.3	\$157,500
	4.2	\$140,000
	4.1	\$122,500
	4.0	\$105,000
	3.9	\$87,500
	3.8	\$70,000
	3.7	\$52,500
	3.6	\$35,000
	3.5	\$17,500
<b>Good or Less</b>	<b>3.4</b>	<b>\$0</b>

**Table 3.4 - Leadership and Management Critical Outcome Additional Performance-Based Fee Matrix**

#### 4.0 COMMUNITY RELATIONS (5%)

**Battelle will involve and benefit the communities to assure that PNNL and Battelle remain valued assets to the Tri-Cities and the Northwest Region.**

Modification: The objectives, indicators and expected levels of performance identified below have been developed based on the best information available at the time. Should circumstances arise which require modifications to any of the objectives, indicators and/or expected levels of performance within this outcome it shall be accomplished through the approved change control process described within this document. If the Parties cannot reach agreement on the changes the Contracting Officer shall have the right to make reasonable changes as specified within the contract DE-AC06-76RL01830.

- 4.1 **Objective - Battelle will continue/establish partnerships with local and regional organizations to enhance science, mathematics, and technology education reform efforts in schools. (15%)**

Description: Through focused partnerships, the Laboratory's human and technical resources, as well as Battelle's corporate distributions are linked with school districts and other academic support organizations to promote science, mathematics, and technology education reform. These partnerships link institutional goals, interests, and capabilities so that substantive collaborations between the Laboratory and schools and other academic support organizations may occur.

##### Performance Indicator

- 4.1.1 **The impact of Laboratory-sponsored programs for teachers of science, mathematics, and technology education in partner school districts.**

Description: This performance indicator measures the impacts of Laboratory-sponsored programs on teachers by measuring three critical areas that affect the quality of learning experiences in classrooms. Impacts of Laboratory programs on 1) teacher content knowledge, 2) field/lab and other skills that can be used in the classroom, and 3) the application/transferability of the experience to the classroom, as reported by teacher participants, are measured.

For each participant's evaluation, the sum for these three criteria is calculated (total of 12 points possible).

##### Performance:

Target:	83% of participants' evaluations have a sum of 10 or higher.
Neutral:	75% of participants' evaluations have a sum of 9 or higher.
Minimum:	70% of participants' evaluations have a sum of 8 or higher.

- 4.2 **Objective - Battelle will put technology to work in the Tri-Cities and Pacific Northwest to create and sustain a diversified and strong economy. (50%)**

##### Performance Indicators

- 4.2.1 **Number of local firms for which technical assistance is initiated each year**

##### Definitions:

1. "local firms" - Local firms are those located in the counties listed below, as well as non-local firms that are being actively recruited to establish operations in the local area.

2. "technical assistance is initiated" – Technical assistance is considered to be initiated after three events have occurred: 1) the firm has submitted a written request for assistance, 2) an assistance agreement has been signed by PNNL and the firm, and 3) funding has been allocated to a researcher to provide technical assistance. In all cases PNNL will make a good faith effort to ensure customer use of the technical assistance. Technical assistance can also take the form of a PNNL-funded study done by graduate students at WSU Tri-Cities. This type of assistance is considered initiated after the students and the client have met to scope the study.
3. "local area" – The 10 county region made up of the two counties that contain the Hanford Site, plus the counties adjacent to them. The counties are: Benton, Franklin, Yakima, Walla Walla, Grant, Klickitat, Adams, and Whitman in Washington and Morrow and Umatilla in Oregon.

Description: This indicator has been developed to track the number of instances in which PNNL's technical resources and its links to WSU Tri-Cities are applied to help diversify the local economy. While PNNL researchers and Economic Development Office staff provide advice and assistance to local firms daily, this indicator measures formal, substantive actions by PNNL. The contractor has committed to provide technical assistance to existing and emerging businesses upon request as part of its efforts to help diversify the local economy. Performance targets for this indicator will be established annually in this plan to reflect the level of direct funding available for technical assistance.

Performance Expectation Related Assumptions: Continuing direct funding for PNNL's technical assistance programs.

Performance targets:

Target:	Initiate technical assistance for 55 firms each year
Neutral:	Initiate technical assistance for 30 firms each year
Minimum:	Initiate technical assistance for 0 firms each year.

#### 4.2.2 Survey of local firms on the value of PNNL technical assistance.

Description: This indicator will measure the level of satisfaction of local firms assisted by PNNL's technical assistance program. Data for this measure will come from Questions 1 and 2 of the survey as follows:

1. Overall, how would you rate the interaction process with PNNL?
2. Please rate the usefulness of the technical assistance provided by PNNL.

This survey will be reviewed by DOE-RL and mailed to the recipients of technical assistance. Satisfaction will be measured on a five point scale where:

1	= Very Dissatisfied
2	= Dissatisfied
3	= Neutral
4	= Satisfied
5	= Very Satisfied

The specific measurement will involve the percentage of partners with a response of satisfied or very satisfied (4 and 5 of the 5-point scale). The percentage for each question will be determined, then an average percentage will be calculated for use in the contingency function for the indicator.

**Performance Expectation Related Assumptions:** Continuing direct funding for PNNL's technical assistance programs.

**Performance Targets:**

Target: Percentage of respondents that score the first two survey questions with 4 or 5 is 80%.  
Neutral: Percentage of respondents that score the first two survey questions with 4 or 5 is 60%.  
Minimum: Percentage of respondents that score the first two survey questions with 4 or 5 is 0%.

4.2.3 The number of new businesses started in the area.

**Description:** The number of new businesses started in the local area, i.e. the ten county region surrounding the Hanford site, where the Contractor had a role in their establishment through one of its economic development programs. These programs include the Entrepreneurial Program, the Small Business Technical Assistance Program, the Targeted Support Program, and the Technology Partnerships Program.

New businesses to be tracked for purposes of measuring this performance indicator will have clear future market potential and will be backed by sound business plans. They will be primary sector-based, expansions of existing businesses (e.g., new subsidiaries, divisions, product lines, models) - new startups or businesses recruited to the Tri-Cities area in which PNNL was involved in their recruitment.

**Performance Expectation Related Assumptions:** Continuing funding (3161 or alternative) for EndLOA, TAP, TSP, and Technology Partnerships.

**Performance Targets:**

Target: 10 new businesses started  
Neutral: 5 new businesses started  
Minimum: 0 new businesses started

4.3 Objective - Battelle will serve the communities to further enhance the Laboratory's status as a valued corporate citizen of the Northwest region. (35%)

**Performance Indicators**

4.3.1 Successfully deploy a community volunteerism program

**Description:** This indicator will measure the implementation of a new program to inform staff of community needs, encourage participation in volunteer programs, and recognize and reward staff for their volunteer efforts. The program will focus on volunteer activities in four categories: arts and culture; civic and community; education and health; and human services.

**Performance steps:** The steps listed below signify elements of the program that are important to its ultimate success. Nothing here shall be construed as an exception to the contract clause entitled "Allowable Costs and Fee." One point is assigned to each step, with a combined value of 8 points. Target: 8 points; Neutral Level: 5 points; Minimum Level: 0 points.

- Put in place an Advisory Council. The council will serve as a sounding board for the program's future directions, and council members will be expected to act as ambassadors for the program.

- Communicate to the staff about the new program. This could include a web site, a newsletter, and informational forums.
- Establish 10 "volunteer projects" within the new program.
- Establish a baseline of volunteer hours.
- Hold a Volunteer Fair featuring the volunteer projects within the new program and highlight additional volunteer opportunities for staff.
- Use feedback from participants to make improvements to the program.
- Begin making contacts with key community agencies to increase program visibility and identify volunteer opportunities.
- Provide training sessions for volunteer project "directors."

**Performance targets:**

Target: 8 points  
Neutral: 5 points  
Minimum: 0 points

- 4.3.2 Battelle will conduct focus group meetings with selected community members and develop a subsequent action plan that specifically addresses a proactive approach to enhance opportunities for the minority population within the Tri-Cities and greater community.

Description: The 1998 Community Survey identified a perception by the Tri-City minority community that PNNL was not adequately meeting their needs. In order to address this and fully understand the type of activities that would enhance minority opportunities, community involvement is essential. Community focus groups will provide the forum for open discussion and ultimately an actionable plan. This plan will frame the building blocks for a long-term positive relationship with the minority population and contribute to the Lab's value as a corporate citizen.

Performance Expectation Related Assumptions: None.

Performance Steps: The following seven steps delineate the process necessary to formulate a plan which enhances the Lab's relationship with the minority community. In addition, the Contractor is cognizant of the need for cultural awareness training for management, which is also incorporated below. The number of points assigned each step is dependent upon the complexity of that step. The total number of points assigned is ten.

- Identify participants and conduct community focus group meetings. These meetings will be facilitated by Lab staff who have expertise in the area of stakeholder meetings. (2 points)
- Simultaneously, in conjunction with Heritage College, develop a cultural awareness training program which, in particular, increases understanding of the Native American culture. (1 point)
- Complete an awareness training pilot program at the Lab. This pilot will include managers and mentors with an expected participation of approximately 10 staff. (1 point)
- Provide an overview of the Lab culture to minority students identified by Heritage College. (1 point)
- From input derived from the community focus group meetings, develop an action plan with measurable outcomes. (2 points)
- Action plan delivered to DOE AMT by August 31, 1999. (1 point)
- DOE AMT review and concurrence of 00 action plan by 9/30/99. (2 points)

Performance Targets:

Target: 10 points  
Neutral: 5 points  
Minimum: 0 points

- 4.3.3 Successful deployment of campaigns to increase awareness of Laboratory capabilities applicable to issues and industries of regional significance.

**Description:** Battelle will deploy a pilot campaign aimed at state opinion leaders to increase name recognition for and positive awareness of the Laboratory's capacity to help resolve regional issues. A separate effort will increase name recognition for and positive awareness of PNNL in a regional industry through a pilot campaign aimed at the Washington biotechnology industry.

**Performance Assumptions:** None.

**Performance Steps:** The steps listed below are sequential within each category. The steps need to be completed in the order listed; we cannot progress to step 3 in issues, for example, without completing step 2. One point is assigned to each step, with a combined value for issues and industry of 10 points.

**Issues**

- Step 1. baseline evaluation of state issues completed
- Step 2. internal audit of PNNL existing activities within issue areas completed
- Step 3. integrated campaign defined
- Step 4. informational activities under way

**Industry**

- Step 1. internal audit of biotechnology capabilities, projects, and facilities completed
- Step 2. baseline survey of biotechnology industry completed
- Step 3. integrated campaign defined
- Step 4. informational activities under way
- Step 5. selected companies/individuals identified for intensive follow-up activities
- Step 6. measurement of increased awareness and name-recognition begun

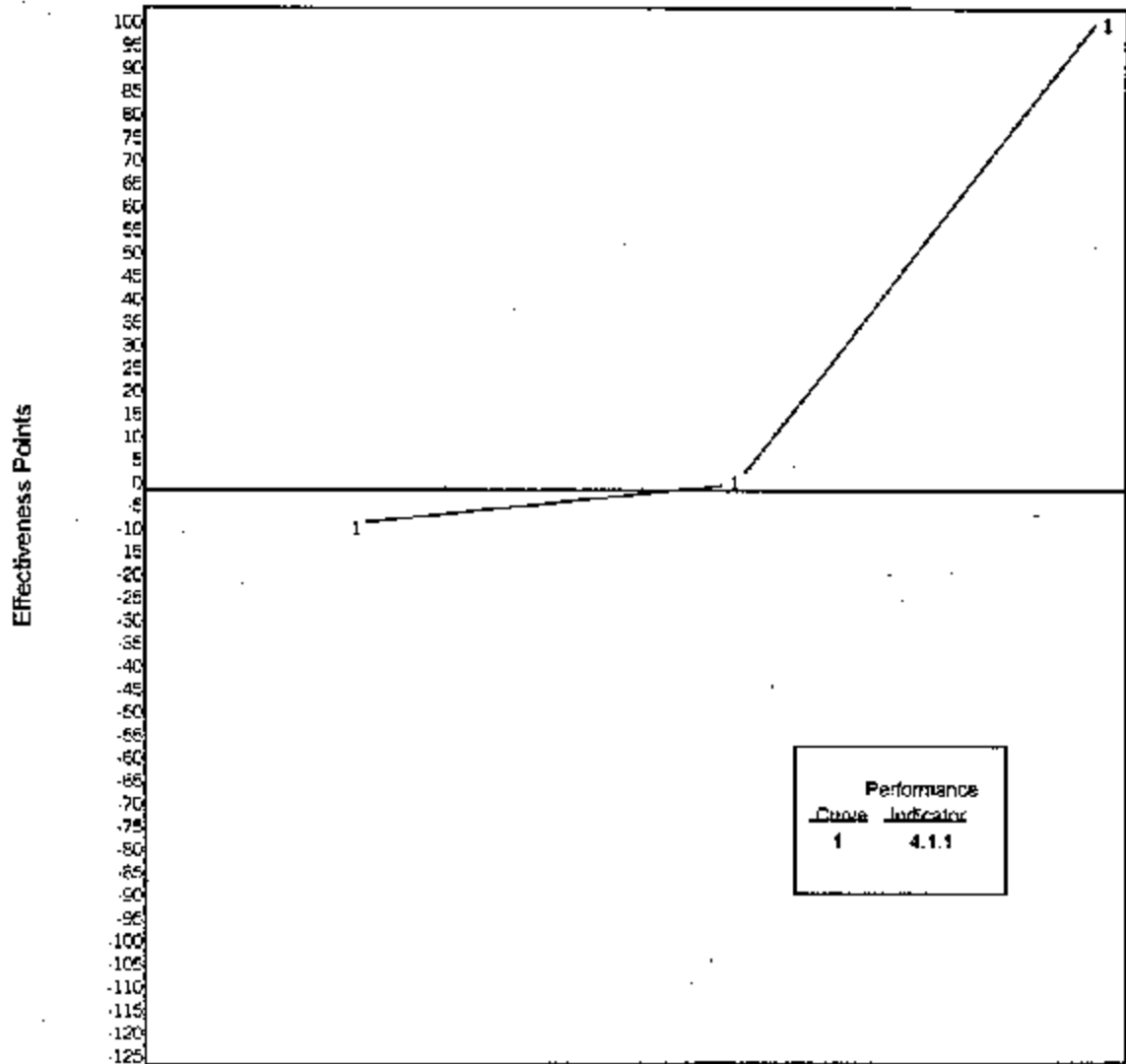
**Performance targets:**

Target:	10 Points (Steps completed)
Neutral:	5 Points (Steps completed)
Minimum:	0 Points (Steps completed)

**Critical Outcome Performance Rating and Additional Performance-Based Fee**

Figures 4A, 4B and 4C document the associated agreements on performance expectations in the form of contingency functions. The overall performance rating for this outcome will be determined by summing the effectiveness scores for all Objectives as depicted in Table 4.1, below, normalizing the scores using Table 4.2 and comparing the normalized sum to the rating scale in Table 4.3. Additional performance-based fee earned (if any) for this outcome is determined by comparing the overall outcome score (5.0 – 3.5) to the amount available within Table 4.4.

**Figure 4A, Community Relations Objective 4.1, Contingency Diagram**



Performance Indicator

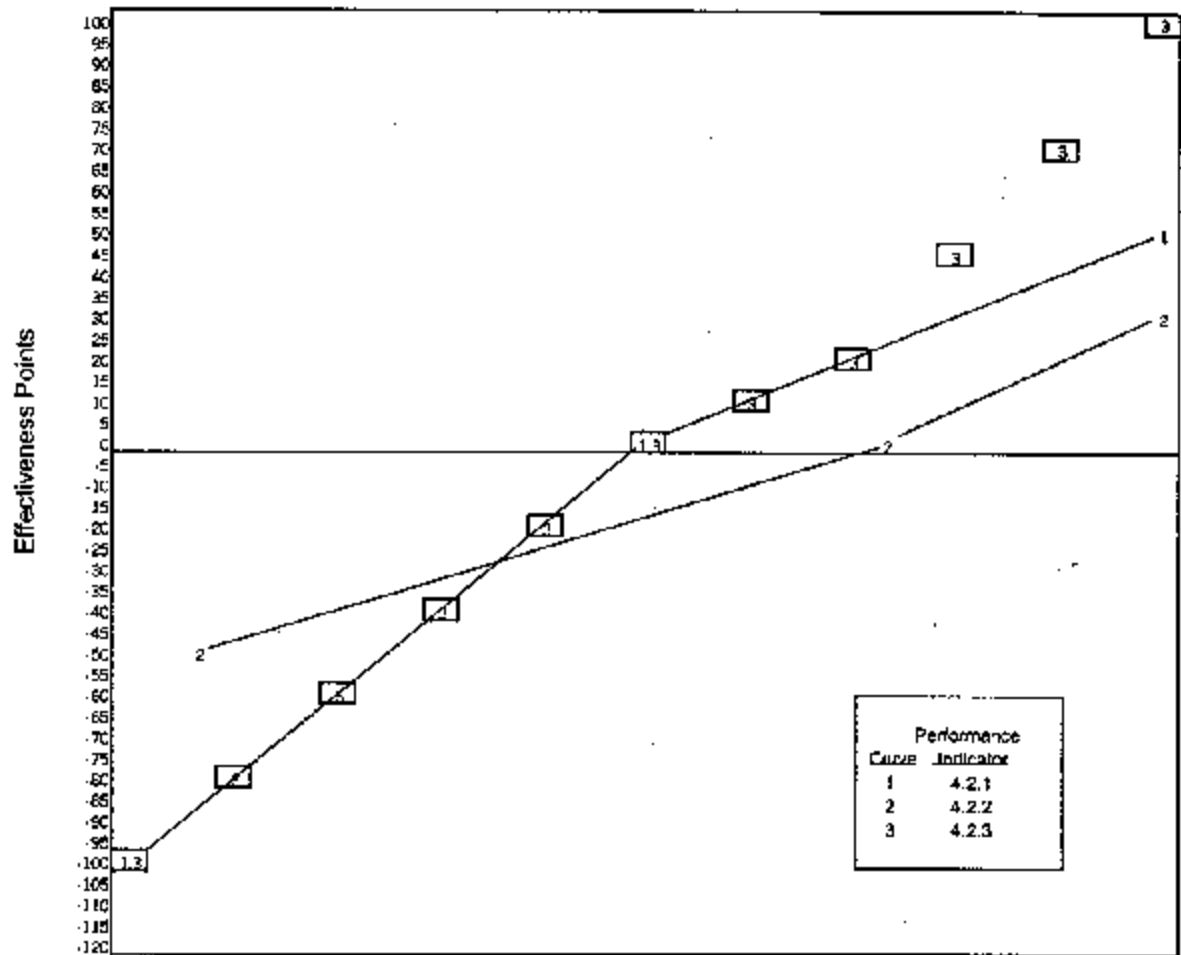
### 1 Impact of Lab-sponsored programs for teachers

### SCALES

					X	71	72	73	74	75	76	77	78	79	83
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Figure 4B, Community Relations Objective 4.2, Contingency Diagram



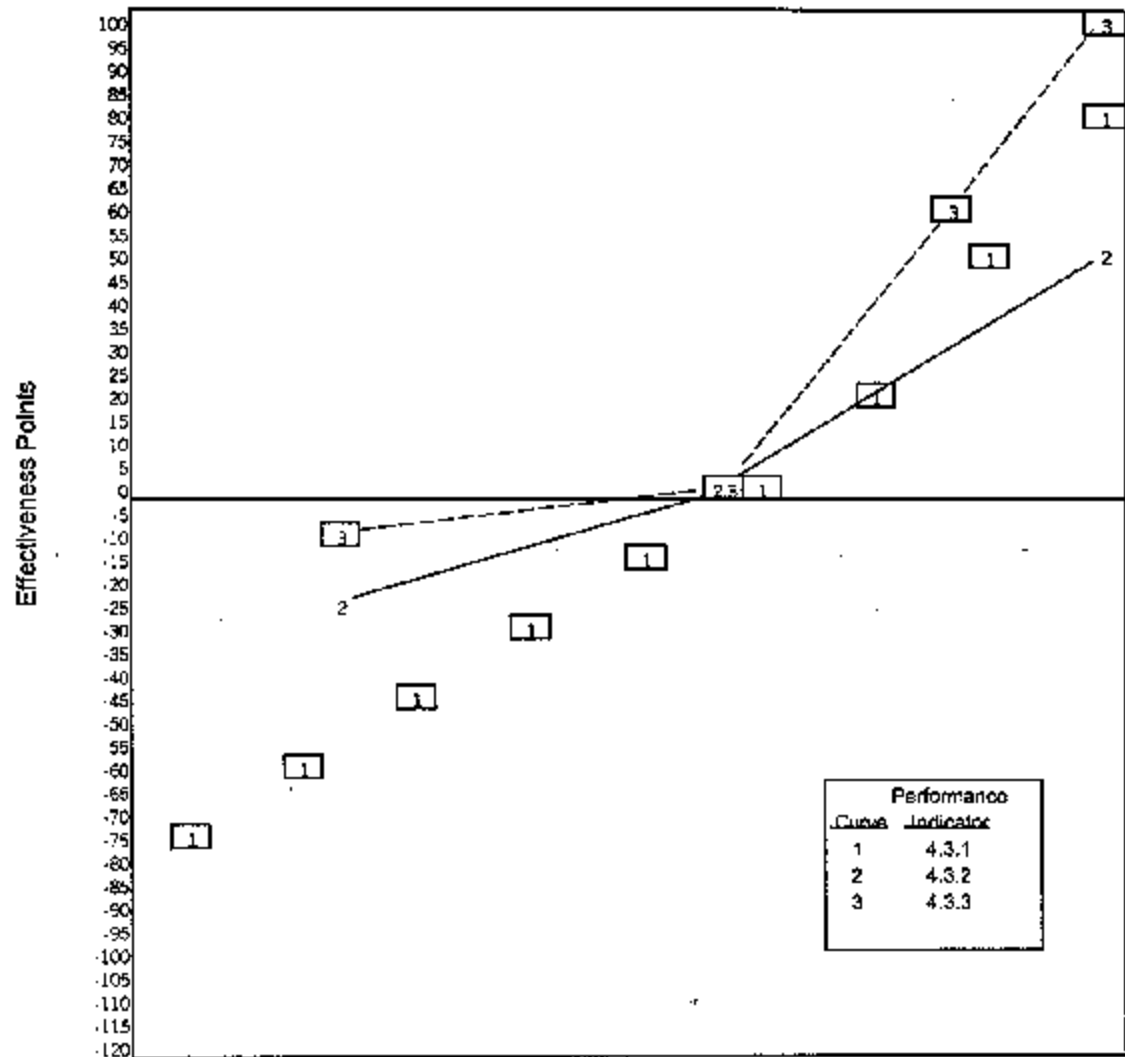
Performance Indicator

- 1 Local Technical Assistance
- 2 Value of Tech Assistance
- 3 New Business Starts

SCALE

0		10		15		20		25		30		35		40		45		50		55
	0		5		10		15		20		25		30		35		40		45	
0		1		2		3		4		5		6		7		8		9		10

Figure 4C, Community Relations Objective 4.3, Contingency Diagram



Performance Indicator

- 1 Community Volunteerism
- 2 Focus Group meetings
- 3 Lab capabilities awareness

SCALES

0	1	2	3	4	5	6	7	8	9	10
0	1	2	3	4	5	6	7	8	9	10
0	1	2	3	4	5	6	7	8	9	10

ELEMENT	Performance Level	Effectiveness Score	Value Points	Weight	Weighted Points
<b>4.0 Community Relations</b>					
<b>4.1 Battelle will continue/establish partnerships with local and regional organizations to enhance science, mathematics and technology education reform efforts in schools</b>					
4.1.1 The impact of Laboratory-sponsored programs for teachers of science, mathematics, and technology education in partner school districts					
<b>Obj 4.1 Total</b>				15%	
<b>4.2 Battelle will put technology to work in the Tri-Cities and Pacific Northwest to create and sustain a diversified and strong economy</b>					
4.2.1 The number of local firms for which technical assistance is initiated each year.					
4.2.2 Survey of local firms on the value of PNNL technical assistance					
4.2.3 The number of new businesses started in the area.					
<b>Obj 4.2 Total</b>				50%	
<b>4.3 Battelle will serve the communities to further enhance the Laboratory's status as a valued corporate citizen of the Northwest region</b>					
4.3.1 Successfully deploy a community volunteerism program					
4.3.2 Battelle will conduct focus group meetings with selected community members and develop a subsequent action plan that specifically addresses a proactive approach to enhance opportunities for the minority population within the Tri-Cities and greater community.					
4.3.3 Successful deployment of campaigns to increase awareness of Laboratory capabilities applicable to issues and industries of regional significance					
<b>Obj 4.3 Total</b>				35%	
				<b>Total</b>	

Table 4.1 - Community Relations Critical Outcome Performance Rating Development

Objective 4.1	Objective 4.2	Objective 4.3	Value Points
100	230	230	5
95	171	219	4.9
90	162	207	4.8
85	153	196	4.7
80	144	184	4.6
75	135	173	4.5
70	126	161	4.4
65	117	150	4.3
60	108	138	4.2
55	99	127	4.1
50	90	115	4
45	81	104	3.9
40	72	92	3.8
35	63	81	3.7
30	54	69	3.6
25	45	58	3.5
20	36	46	3.4
15	27	35	3.3
10	18	23	3.2
5	9	12	3.1
0	0	0	3
-1	-13	-6	2.9
-1	-25	-11	2.8
-2	-38	-17	2.7
-2	-50	-22	2.6
-3	-63	-28	2.5
-3	-75	-33	2.4
-4	-88	-39	2.3
-4	-100	-44	2.2
-5	-113	-50	2.1
-5	-125	-55	2
-6	-138	-61	1.9
-6	-150	-66	1.8
-7	-163	-72	1.7
-7	-175	-77	1.6
-8	-188	-83	1.5
-8	-200	-88	1.4
-9	-213	-94	1.3
-9	-225	-99	1.2
-10	-238	-105	1.1
-10	-250	-110	1

Table 4.2 - Community Relations Critical Outcome Score Normalization Table

Total Score	5.0 - 4.5	4.4 - 3.5	3.4 - 2.5	2.4 - 1.5	1.4 - 1.0
Final Rating	Outstanding	Excellent	Good	Marginal	Unsatisfactory

Table 4.3 - Community Relations Critical Outcome Final Rating

Outcome Rating	Score	Performance-Based Fee
Outstanding	5.0	\$70,000
	4.9	\$65,625
	4.8	\$61,250
	4.7	\$56,875
	4.6	\$52,500
	4.5	\$48,125
Excellent	4.4	\$43,750
	4.3	\$39,375
	4.2	\$35,000
	4.1	\$30,625
	4.0	\$26,250
	3.9	\$21,875
	3.8	\$17,500
	3.7	\$13,125
	3.6	\$8,750
	3.5	\$4,375
Good or Less	3.4	\$0

Table 4.4 - Community Relations Outcome Additional Performance-Based Fee Matrix

#### IV. SELF-ASSESSMENT

RL views the Contractor's self-assessment as the primary tool to determine if they are accomplishing agreed-to outcomes, objectives and performance measures and doing so in a manner that is acceptable. In addition, the Contractor utilizes self-assessment as a primary mechanism for evaluating the overall effectiveness of their organizations and to promote continuous improvement. The key to the performance-based evaluation process, which we have employed within the Laboratory, is the utilization of self-assessment as the primary tool for evaluation of the Contractor. In order for this concept to succeed we must diligently work with our contractor counterparts throughout each year to track the progress of the outcomes and objectives set forth within the contract or the individual Division and Directorate-level self-assessment plans. This regular interaction should be carried out under the principles of partnership and trust that form the basis of our relationship with the Contractor.

##### I. Contractor Laboratory Level Self-Assessments

The Contractor is required to deliver a Laboratory Level Self-Assessment Plan to the RL Office of Assistant Manager for Science and Technology (AMT) within the first quarter of each fiscal year. This plan is to include the Critical Outcomes and their corresponding objectives and performance indicators as well as a compilation of the independent Division and Directorate self-assessment plans.

The Contractor is required to provide monthly and/or quarterly updates (as appropriate) on the performance of the Critical Outcomes and their corresponding performance indicators. The Contractor shall provide a formal status briefing at mid-year, with a formal self-evaluation report issued to RL at year-end. Specific due dates for the above mentioned briefings and reports shall to be agreed upon by the Laboratory Director and the RL Assistant Manager for Science & Technology.

In addition, the year-end report must provide:

- an overall summary of performance for FY99
- performance ratings for each critical outcome and the Laboratory overall, and
- a summary of key strengths and weaknesses identified as part of the Division/Directorate level self-assessment activities.

##### II. Contractor Division and Directorate Level Self-Assessments

The Contractor shall develop Division and Directorate-level self-assessment plans for each fiscal year. Using the critical outcomes as the basis, Division and Directorate-level self-assessment plans are to be developed in cooperation with both their internal and external (RL, HQ, or other counterparts). Final plans are to be provided to the Contractor's Director of Quality with a copy issued to the AMT Management and Economic Transition Division. Copies of the individual plans should also be provided to the corresponding external RL customer (as appropriate).

The year-end Division and Directorate-level self-evaluation reports are to be submitted to the Contractor's Director of Quality as part of the Integrated Self-Assessment Program. The mid-year reports are not required deliverables to RL however; it is recommended that they be made available to the appropriate RL counterparts for purposes of assisting RL with their management and oversight responsibilities. Copies of the year-end Division and Directorate-level self-evaluation reports are to be provided to the AMT Management and Economic Transition Division and the corresponding external RL customer.

### III. RL Annual Performance Evaluation

RL will conduct an annual performance review during the first quarter following the end of each fiscal year culminating in a final evaluation report issued to the Contractor. This review will provide RL with a formal opportunity to follow-up on any specific issues associated with the critical outcomes or Division/Directorate level self-assessment activities. Use of the Contractor's year-end self-assessment reports, knowledge gained through daily interactions, DOE "For Cause" reviews (if any), and any reviews conducted by outside organizations (i.e., OIG, GAO, DCAA) should be the primary means for determining the Contractor's performance for the year. This information, along with the results of any individual issue reviews (as necessary) during the two-week review period, shall be utilized to provide the Contractor with the overall written performance appraisal.

APPENDIX A: CHANGE CONTROL TRACKING SHEET

FY99 Performance Evaluation and Fee Agreement

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Identification:

Date: \_\_\_\_\_ Change No. \_\_\_\_\_

Critical Outcome: \_\_\_\_\_

Objective Number(s): \_\_\_\_\_ Performance Indicator Number(s): \_\_\_\_\_

---

Discussion:

1. Description of Proposed Modification: Attach to this form.
2. Rationale/Justification for Modification: Attach to this form.

---

Concurrence:

Battelle Point-of-Contact (preparer): \_\_\_\_\_  
(Typed or Printed Name) / (Initials) / (Date)

RL Point-of-Contact: \_\_\_\_\_  
(Typed or Printed Name) / (Initials) / (Date)

Battelle Critical Outcome Owner: \_\_\_\_\_  
(Typed or Printed Name) / (Initials) / (Date)

RL Critical Outcome Owner: \_\_\_\_\_  
(Typed or Printed Name) / (Initials) / (Date)

---

Administrative Processing:

Battelle Review: \_\_\_\_\_ RL Review: \_\_\_\_\_

Revision of Performance Evaluation document into which the Change was incorporated: \_\_\_\_\_

Contract Modification Required? \_\_\_\_\_ Yes \_\_\_\_\_ No

---

Approvals:

Battelle Contracting Officer

RL Contracting Officer

\_\_\_\_\_  
(Name Typed)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Name Typed)

\_\_\_\_\_  
(Date)

---

Revision 0, 10/1/98



SECTION J - APPENDIX G

LISTING OF KEY PERSONNEL

The employees whose names appear below are Key Personnel and their assignment, reassignment, or removal is subject to the clause entitled Key Personnel:

1. W.J. Madia, Director
2. W.J. Apley, Director for the FTF Standby Project Office and Director's "Standing Delegate"
3. T.J. Baranouskas, Chief Financial Officer
4. B.D. Shipp, Associate Laboratory Director, Environmental Technology Division
5. J.W. Smith, Deputy Laboratory Director for Operations
6. G.M. Stokes, Associate Laboratory Director, Environmental and Health Sciences Division
7. R.D. Enge, Director, Environment, Safety and Health



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

AUG 09 1999

99-PRO-727

Dr. W. J. Madia, Director  
Pacific Northwest National Laboratory  
Richland, Washington 99352

Dear Dr. Madia:

CONTRACT NO. DE-AC06-76RL01830 - MODIFICATION M304

Enclosed for your files is a fully executed copy of the subject modification. Please contact me on (509) 376-5300 if you have any questions.

Sincerely,

**ORIGINAL SIGNED BY**

Theodore N. Turpin, Jr.  
Contracting Officer

PRO:TNT

Enclosure

cc w/encl:  
K. L. Hoewing, PNNL

bcc: PRO OFF FILE  
PRO RDG FILE  
CCC RDG FILE (W/ENCL)  
T. L. DAVIS, MET (W/ENCL)

RECORD NOTE: None.

FILE: ENTED\MOD 304

**RECEIVED**

AUG 09 1999  
DOE RL/CCC

Office >	PRO Y-				
Surname >	TO: T. L. DAVIS				
Date >	8/9/99				

(Please return to Shona Saylor 5-7487 AS-58/FED FAX 5-5378 )

Document No. 13745